

Naval Medical Center Portsmouth (NMCP) COVID-19 Literature Report #90: Friday, 01 April 2022

Prepared By: Tracy C. Shields, MSIS, AHIP (Ms.; she/her) <tracy.c.shields2.civ@mail.mil>
Naval Medical Center Portsmouth; Library Services, Reference Medical Librarian

Purpose: These reports, published every other week on Fridays, are curated collections of current research, special reports, and news regarding the COVID-19 pandemic that may be of interest to medical providers, leadership, and decision makers. I welcome questions, suggestions for future topics, or other feedback. If this report made a difference or impacted patient care, please let me know!

All reports are available online at <https://nmcp.libguides.com/covidreport>. Access is private; you will need to use the direct link or bookmark the URL.

Disclaimer: I am not a medical professional. This document is current as of the date noted above. While I make every effort to find and summarize available data, I cannot cover everything in the literature on COVID-19. Due to the rapid evolution of the literature, I will not update past reports when new information arises; for retracted papers specific to COVID-19, see the [list of retracted papers from Retraction Watch](#).

TABLE OF CONTENTS

The Big Picture 2	Pregnancy and Postpartum Period 19
SARS-CoV-2 Virus and Variants 4	Pediatric Population 21
Transmission, Exposure, and Surveillance 5	Healthcare Workers 24
COVID-19 Vaccines 7	Disparities and Health Equity 25
Treatments and Management 10	Special Topic: Intimate Partner Violence 29
Pre-Existing Conditions and Comorbidities 15	Other Infectious Diseases and Public Health Threats 33
Long COVID and Other Complications 16	References 34

The Big Picture

News in Brief

This report, #90, marks 2 years of these summaries, started soon after the pandemic was declared. New this week, the government has unveiled [COVID.gov](https://www.covid.gov), a website for resources on testing, treatment, masks, and vaccines.

"America is about to test how long 'normal' can hold: Whenever it arrives, the next surge could put the country's tolerance for disease and death in full relief" ([Atlantic](#)).

"Experts worry about how US will see next COVID surge coming" ([AP](#)).

Changes to the System

According to a new white paper, telehealth use grew by 7,060% from 2019 to 2020 ([FAIR](#); see also: [full text report \[pdf\]](#)).

"Supply map created to predict drug shortages, find solutions" ([CIDRAP](#); see also: [USP's Medicine Supply Map](#)).

COVID Origins

"Scientists struggle to probe COVID's origins amid sparse data from China: Origin investigations typically take years, but some researchers say China is delaying the process for political reasons as international tensions rise" ([Nature](#)).

"Curious Coincidence" is a 5-part podcast that "dives into the mysterious origins of Covid-19 by examining China's trade in wild animals, the labs doing sensitive research on dangerous pathogens, and questions of whether a lab accident may have touched off a global pandemic" ([MIT Tech Rev](#)).

Long Reads

"The internet's funniest doctor is in on the joke" ([STAT](#)). If you aren't familiar with Dr. Glaucomflecken on social media, you should really check him out.

"Lessons from the COVID data wizards: Data dashboards have been an important part of pandemic response and planning. What have their developers learnt about communicating science in a crisis?" ([Nature](#)).

"How COVID exploded in Hong Kong: With startling speed, a success story turned tragic. What went wrong?" ([New Yorker](#))

Journal Articles

Pandemic Impact on Other Diseases

Cancer: [A national quality improvement study identifying and addressing cancer screening deficits due to the COVID-19 pandemic](#) (21 March 2022)

"Background: Cancer-related deaths over the next decade are expected to increase due to cancer screening deficits associated with the coronavirus disease 2019 (COVID-19) pandemic. Although national deficits have been quantified, a structured response to identifying and addressing local deficits has not been widely available. The objectives of this report are to share preliminary data on monthly screening deficits in breast, colorectal, lung, and cervical cancers across diverse settings and to provide online materials from a national quality improvement (QI) study to help other institutions to address local screening deficits.

Methods: This prospective, national QI study on Return-to-Screening enrolled 748 accredited cancer programs in the United States from April through June 2021. Local prepandemic and pandemic monthly screening test volumes (MTVs) were used to calculate the relative percent change in MTV to describe the monthly screening gap.

Results: The majority of facilities reported monthly screening deficits (colorectal cancer, 80.6% [n = 104/129]; cervical cancer, 69.0% [n = 20/29]; breast cancer, 55.3% [n = 241/436]; lung cancer, 44.6% [n = 98/220]). Overall, the median relative percent change in MTV ranged from -17.7% for colorectal cancer (interquartile range [IQR], -33.6% to -2.8%), -6.8% for cervical cancer (IQR, -29.4% to 1.7%), -1.6% for breast cancer (IQR, -9.6% to 7.0%), and 1.2% for lung cancer (IQR, -16.9% to 19.0%). Geographic differences were not observed. There were statistically significant differences in the percent change in MTV between institution types for colorectal cancer screening (P = .02).

Conclusion: Cancer screening is still in need of urgent attention, and the screening resources made available online may help facilities to close critical gaps and address screenings missed in 2020."

CMAJ: [Impact of cancer surgery slowdowns on patient survival during the COVID-19 pandemic: a microsimulation modelling study](#) (21 March 2022)

"Background: With the declaration of the global pandemic, surgical slowdowns were instituted to conserve health care resources for anticipated surges in patients with COVID-19. The long-term implications on survival of these slowdowns for patients with cancer in Canada is unknown.

Methods: We constructed a microsimulation model based on real-world population data on cancer care from Ontario, Canada, from 2019 and 2020. Our model estimated wait times for

cancer surgery over a 6-month period during the pandemic by simulating a slowdown in operating room capacity (60% operating room resources in month 1, 70% in month 2, 85% in months 3-6), as compared with simulated prepandemic conditions with 100% resources. We used incremental differences in simulated wait times to model survival using per-day hazard ratios for risk of death. Primary outcomes included life-years lost per patient and per cancer population. We conducted scenario analyses to evaluate alternative, hypothetical scenarios of different levels of surgical slowdowns on risk of death.

Results: The simulated model population comprised 22 799 patients waiting for cancer surgery before the pandemic and 20 177 patients during the pandemic. Mean wait time to surgery prepandemic was 25 days and during the pandemic was 32 days. Excess wait time led to 0.01-0.07 life-years lost per patient across cancer sites, translating to 843 (95% credible interval 646-950) life-years lost among patients with cancer in Ontario.

Interpretation: Pandemic-related slowdowns of cancer surgeries were projected to result in decreased long-term survival for many patients with cancer. Measures to preserve surgical resources and health care capacity for affected patients are critical to mitigate unintended consequences."

SARS-CoV-2 Virus and Variants

News in Brief

"Omicron 'stealth' COVID variant BA.2 now dominant globally" ([Reuters](#)).

"Genome data gaps could stymie search for next COVID variant" ([Nature](#)).

Journal Articles

Lancet: [SARS-CoV-2 co-infection with influenza viruses, respiratory syncytial virus, or adenoviruses](#) (25 March 2022)

"We examined clinical outcomes of co-infection with influenza viruses, respiratory syncytial virus, or adenoviruses in 212 466 adults with SARS-CoV-2 infection who were admitted to hospital in the UK between Feb 6, 2020, and Dec 8, 2021....

In this weighted multivariable regression analysis, influenza virus co-infection significantly increased the odds of receiving invasive mechanical ventilation and the odds of in-hospital mortality."

Transmission, Exposure, and Surveillance

News in Brief

"Why are Shanghai's COVID infections nearly all asymptomatic?" ([Reuters](#))

"Covid-19 safety doesn't have to be all or nothing. Here's how to think about it going forward" ([Vox](#)).

"Get ready for a wave of missed infections: At last, rapid COVID tests are everywhere—and that means a surge of false-negative results" ([Atlantic](#)).

"Into the wild: animals the lastest frontier in the COVID fight" ([AP](#)).

Aerosols and Ventilation

"White House diverges from CDC, focuses on aerosol COVID spread" ([CIDRAP](#); see also: [WH blog post](#)).

"Italian study shows ventilation can cut school COVID cases by 82%" ([Reuters](#)).

Journal Articles

J Infect Dis: [The Concept of Classical Herd Immunity May Not Apply to COVID-19](#) (31 March 2022)

"There has been speculation about when in the COVID-19 pandemic we will be able to live with the virus in a manner that does not disrupt most peoples' lives. Much of this discussion has focused on herd immunity thresholds...

SARS-CoV-2, the virus that causes COVID-19, is so different from polio and measles that classical herd immunity may not readily apply to it. Important differences include the phenotypic stability of polio and measles viruses, and their ability to elicit long-term protective immunity, compared to SARS-CoV-2. For these and other reasons, controlling COVID-19 by increasing herd immunity may be an elusive goal."

Rev Med Virol: [Effectiveness of rapid antigen testing for screening of asymptomatic individuals to limit the transmission of SARS-CoV-2: A rapid review](#) (29 March 2022)

"Rapid antigen detection tests (RADTs) offer advantages over gold-standard reverse transcription polymerase chain reaction (RT-PCR) tests in that they are cheaper and provide faster results, thus enabling prompt isolation of positive SARS-CoV-2 cases and quarantine of close contacts. The aim of this study was to collate and synthesise empirical evidence on the effectiveness of rapid antigen testing for the screening (including serial testing) and surveillance of asymptomatic individuals to limit the transmission of SARS-CoV-2. A rapid

review was undertaken in MEDLINE (EBSCO), EMBASE (OVID), Cochrane Library, Europe PMC and Google Scholar up until 19 July 2021, supplemented by a grey literature search. Of the identified 1222 records, 19 reports referring to 16 studies were included. Eight included studies examined the effectiveness of RADTs for population-level screening, four for pre-event screening and four for serial testing (schools, a prison, a university sports programme and in care homes). Overall, there is uncertainty regarding the effectiveness of rapid antigen testing for the screening of asymptomatic individuals to limit the transmission of SARS-CoV-2. This uncertainty is due to the inconsistent results, the relatively low number of studies identified, the predominantly observational and/or uncontrolled nature of the study designs used, and concerns regarding methodological quality. Given this uncertainty, more real-world research evidence in relevant settings, which is of good quality and timely, as well as economic evaluation, is required to inform public policy on the widespread use of RADTs in asymptomatic individuals."

Disaster Med Public Health Prep: [Effectiveness of a COVID-19 Preventive Sequestration Strategy: Deployment of the Aircraft Carrier USS Ronald Reagan \(CVN-76\)](#) (23 March 2022)

"Objectives: Develop and evaluate a pre-deployment sequestration (PDS) protocol to prevent SARS-CoV-2 cases on board the USS RONALD REAGAN (CVN-76).

Methods: The USS RONALD REAGAN includes a crew of approximately 3,000 Sailors and an embarked Air Wing of 2,000 personnel. The PDS was conducted in three waves of 14-day strict quarantines during the months of April and May 2020. Sailors were cleared to board the ship with two negative rtPCR tests at days 14 and 16. The ship was sanitized prior to Wave 1 boarding.

Results: From March 1, 2020 through May 31, 2020, a total of 51 SARS-CoV-2 positive cases were detected. During the three waves of PDS, 28 Sailors were found to be positive on exit testing (14, 11, and 3, respectively); no cases were found among the Air Wing. During the first 90 days at sea, no SARS-CoV-2 cases were detected among any of the embarked personnel.

Conclusions: Although resource-intensive, the PDS protocol implemented for USS RONALD REAGAN resulted in a COVID-free ship during a global pandemic with unprecedented scope. Elements of this pandemic PDS protocol may be useful in other highly risk-averse environments with no tolerance for COVID-19 infections."

Clin Infect Dis: [Impact of SARS-CoV-2 Vaccination and Paediatric Age on Delta Variant Household Transmission](#) (22 March 2022)

"Background: The impact of SARS-CoV-2 vaccination status and paediatric age on transmission of the Delta variant is key to preventing COVID-19 spread. In Singapore,

quarantine of all close-contacts, and quarantine-entry and exit PCR testing, enabled evaluation of these factors.

Methods: This retrospective cohort study included all household close-contacts between March 1, 2021 and August 31, 2021. Logistic regression using generalized estimating equations was used to determine risk factors associated with SARS-CoV-2 acquisition and symptomatic disease.

Findings: Among 8470 Delta variant-exposed household close-contacts linked to 2583 indices, full-vaccination of the index with BNT162b2 or mRNA-1273 was associated with significant reduction in SARS-CoV-2 acquisition by contacts (adjusted odds ratio [aOR]:0.56, 95% robust confidence interval [RCI]:0.44-0.71 and aOR:0.51, 95%RCI:0.27-0.96 respectively). Compared to young adults (18-29y), children (0-11y) were significantly more likely to transmit (aOR:2.37 [95%RCI:1.57-3.60]) and acquire (aOR:1.43 [95%RCI:1.07-1.93]) infection, taking into account vaccination status. Longer duration from completion of vaccination among contacts was associated with decline in protection against acquisition (first-month aOR:0.42, 95%RCI:0.33-0.55; fifth-month aOR:0.84, 95%RCI:0.55-0.98; $p<0.0001$ for trend) and symptomatic disease (first-month aOR:0.30, 95%RCI:0.23-0.41; fifth-month aOR:0.62, 95%RCI:0.38-1.02; $p<0.0001$ for trend). Contacts immunized with mRNA-1273 had significant reduction in acquisition (aOR:0.73, 95%RCI:0.58-0.91) compared to BNT162b2.

Conclusions: Among household close-contacts, vaccination prevented onward SARS-CoV-2 transmission and there was increased risk of SARS-CoV-2 acquisition and transmission among children compared with young adults. Time after completion of vaccination and vaccine type affected SARS-CoV-2 acquisition."

COVID-19 Vaccines

News in Brief

"Vaccines protect against infection from Omicron subvariant — but not for long" ([Nature](#)).

"The Covid-19 vaccine market is getting crowded — as demand begins to wane" ([STAT](#)).

"COVID vaccines: head-to-head comparison reveals how they stack up" ([Nature](#); see also: [bioRxiv preprint](#)).

Boosters

"FDA authorizes second coronavirus booster shot for people 50 and older" ([WP](#)).

The FDA's Vaccines and Related Biological Products Advisory Committee will meet 06 April 2022 to consider the appropriateness and need of future vaccine boosters ([FDA](#)).

"White House officials say U.S. has exhausted funds to buy potential fourth vaccine dose for all Americans" ([WP](#)).

Adverse Effects

"WHO examining potential hearing problems linked to Covid vaccines — A small number of cases of tinnitus, or ringing in the ears, have been reported by people who received Covid vaccines internationally and in the U.S." ([NBC](#)).

Long Reads

"Why Covax, the best hope for vaccinating the world, was doomed to fall short" ([WP](#)).

Journal Articles

Lancet Glob Health: [COVID-19 vaccine dose sparing: strategies to improve vaccine equity and pandemic preparedness](#) (01 April 2022)

"Despite tremendous efforts, worldwide COVID-19 vaccination coverage is lagging. Dose-sparing strategies for COVID-19 vaccines can increase vaccine availability to address the global crisis. Several clinical trials evaluating dose sparing are currently underway. However, to rapidly provide solid scientific justification for different dose-sparing strategies, joint coordinated action involving both public and private parties is needed. In this Viewpoint, we provide examples of approaches to vaccine dose-sparing that have previously been evaluated in clinical trials to improve vaccine availability and reflect on the origin of their funding. With a focus on the current COVID-19 pandemic, we stress the need for expedited testing of vaccine dose-sparing strategies in endemic or epidemic infectious diseases. However, we argue that the establishment of a mechanism through which dose-sparing opportunities are systematically identified, scientifically tested, and ultimately implemented will prove to be valuable beyond the current pandemic for infectious diseases product development and pandemic preparedness in the future."

MMWR: [Effectiveness of mRNA Vaccination in Preventing COVID-19–Associated Invasive Mechanical Ventilation and Death — United States, March 2021–January 2022](#) (25 March 2022)

"What is already known about this topic? COVID-19 mRNA vaccines provide protection against COVID-19 hospitalization among adults. However, how well mRNA vaccines protect

against the most severe outcomes of COVID-19–related illness, including use of invasive mechanical ventilation (IMV) or death, is uncertain.

What is added by this report? Receiving 2 or 3 doses of an mRNA COVID-19 vaccine was associated with a 90% reduction in risk for COVID-19–associated IMV or death. Protection of 3 mRNA vaccine doses during the period of Omicron predominance was 94%.

What are the implications for public health practice? COVID-19 mRNA vaccines are highly effective in preventing the most severe forms of COVID-19. CDC recommends that all persons eligible for vaccination get vaccinated and stay up to date with COVID-19 vaccination."

NEJM: [Safety and Efficacy of a Third Dose of BNT162b2 Covid-19 Vaccine](#) (23 March 2022)

"Background: Active immunization with the BNT162b2 vaccine (Pfizer-BioNTech) has been a critical mitigation tool against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection during the coronavirus disease 2019 (Covid-19) pandemic. In light of reports of waning protection occurring 6 months after the primary two-dose vaccine series, data are needed on the safety and efficacy of offering a third (booster) dose in persons 16 years of age or older.

Methods: In this ongoing, placebo-controlled, randomized, phase 3 trial, we assigned participants who had received two 30-µg doses of the BNT162b2 vaccine at least 6 months earlier to be injected with a third dose of the BNT162b2 vaccine or with placebo. We assessed vaccine safety and efficacy against Covid-19 starting 7 days after the third dose

Results: A total of 5081 participants received a third BNT162b2 dose and 5044 received placebo. The median interval between dose 2 and dose 3 was 10.8 months in the vaccine group and 10.7 months in the placebo group; the median follow-up was 2.5 months. Local and systemic reactogenicity events from the third dose were generally of low grade. No new safety signals were identified, and no cases of myocarditis or pericarditis were reported. Among the participants without evidence of previous SARS-CoV-2 infection who could be evaluated, Covid-19 with onset at least 7 days after dose 3 was observed in 6 participants in the vaccine group and in 123 participants in the placebo group, which corresponded to a relative vaccine efficacy of 95.3% (95% confidence interval, 89.5 to 98.3).

Conclusions: A third dose of the BNT162b2 vaccine administered a median of 10.8 months after the second dose provided 95.3% efficacy against Covid-19 as compared with two doses of the BNT162b2 vaccine during a median follow-up of 2.5 months."

Treatments and Management

News in Brief

The NIH has updated its COVID treatment guidelines regarding testing, prevention, and prioritizing of therapies ([NIH](#)).

"FDA limits use of Sotrovimab to treat COVID-19 in additional U.S. regions due to the BA.2 Omicron sub-variant" ([FDA](#)).

"Doctors finding hurdles to using pills to treat COVID-19" ([AP](#)).

"A new federal website aims to solve a key COVID problem: where to get antiviral pills" ([NPR](#)).

Long Reads

"It's not too late for new Covid-19 drugs to change the pandemic. The new, easy-to-take antivirals are now on pharmacy shelves. This is who they stand to help the most" ([Vox](#)).

Journal Articles

NEJM: [Early Outpatient Treatment for Covid-19 with Convalescent Plasma](#) (30 March 2022)

"Background: Polyclonal convalescent plasma may be obtained from donors who have recovered from coronavirus disease 2019 (Covid-19). The efficacy of this plasma in preventing serious complications in outpatients with recent-onset Covid-19 is uncertain.

Methods: In this multicenter, double-blind, randomized, controlled trial, we evaluated the efficacy and safety of Covid-19 convalescent plasma, as compared with control plasma, in symptomatic adults (≥ 18 years of age) who had tested positive for severe acute respiratory syndrome coronavirus 2, regardless of their risk factors for disease progression or vaccination status. Participants were enrolled within 8 days after symptom onset and received a transfusion within 1 day after randomization. The primary outcome was Covid-19-related hospitalization within 28 days after transfusion.

Results: Participants were enrolled from June 3, 2020, through October 1, 2021. A total of 1225 participants underwent randomization, and 1181 received a transfusion. In the prespecified modified intention-to-treat analysis that included only participants who received a transfusion, the primary outcome occurred in 17 of 592 participants (2.9%) who received convalescent plasma and 37 of 589 participants (6.3%) who received control plasma (absolute risk reduction, 3.4 percentage points; 95% confidence interval, 1.0 to 5.8; $P = 0.005$), which corresponded to a relative risk reduction of 54%. Evidence of efficacy in vaccinated participants cannot be inferred from these data because 53 of the 54 participants with Covid-19 who were hospitalized were unvaccinated and 1 participant was

partially vaccinated. A total of 16 grade 3 or 4 adverse events (7 in the convalescent-plasma group and 9 in the control-plasma group) occurred in participants who were not hospitalized.

Conclusions: In participants with Covid-19, most of whom were unvaccinated, the administration of convalescent plasma within 9 days after the onset of symptoms reduced the risk of disease progression leading to hospitalization."

NEJM: [Effect of Early Treatment with Ivermectin among Patients with Covid-19](#) (30 March 2022)

"Background: The efficacy of ivermectin in preventing hospitalization or extended observation in an emergency setting among outpatients with acutely symptomatic coronavirus disease 2019 (Covid-19), the disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is unclear.

Methods: We conducted a double-blind, randomized, placebo-controlled, adaptive platform trial involving symptomatic SARS-CoV-2-positive adults recruited from 12 public health clinics in Brazil. Patients who had had symptoms of Covid-19 for up to 7 days and had at least one risk factor for disease progression were randomly assigned to receive ivermectin (400 µg per kilogram of body weight) once daily for 3 days or placebo. (The trial also involved other interventions that are not reported here.) The primary composite outcome was hospitalization due to Covid-19 within 28 days after randomization or an emergency department visit due to clinical worsening of Covid-19 (defined as the participant remaining under observation for >6 hours) within 28 days after randomization.

Results: A total of 3515 patients were randomly assigned to receive ivermectin (679 patients), placebo (679), or another intervention (2157). Overall, 100 patients (14.7%) in the ivermectin group had a primary-outcome event, as compared with 111 (16.3%) in the placebo group (relative risk, 0.90; 95% Bayesian credible interval, 0.70 to 1.16). Of the 211 primary-outcome events, 171 (81.0%) were hospital admissions. Findings were similar to the primary analysis in a modified intention-to-treat analysis that included only patients who received at least one dose of ivermectin or placebo (relative risk, 0.89; 95% Bayesian credible interval, 0.69 to 1.15) and in a per-protocol analysis that included only patients who reported 100% adherence to the assigned regimen (relative risk, 0.94; 95% Bayesian credible interval, 0.67 to 1.35). There were no significant effects of ivermectin use on secondary outcomes or adverse events.

Conclusions: Treatment with ivermectin did not result in a lower incidence of medical admission to a hospital due to progression of Covid-19 or of prolonged emergency department observation among outpatients with an early diagnosis of Covid-19."

JAMA Netw Open: [Association of Early Aspirin Use With In-Hospital Mortality in Patients With Moderate COVID-19](#) (24 March 2022)

"Question: Is early aspirin use in hospitalized patients with moderate COVID-19 associated with lower odds of in-hospital mortality?

Findings: In a cohort study of 112 269 patients with moderate COVID-19, early aspirin use during the first day of hospitalization was associated with lower 28-day in-hospital mortality and pulmonary embolism incidence when compared with patients who did not receive early aspirin.

Meaning: This study suggests that early aspirin use may be associated with lower odds of in-hospital mortality among hospitalized patients with moderate COVID-19; these findings warrant further study in a randomized clinical trial that includes diverse patients with cardiovascular comorbidities."

BMJ: [Prone positioning of patients with moderate hypoxaemia due to covid-19: multicentre pragmatic randomised trial \(COVID-PRONE\)](#) (23 March 2022)

"Objectives: To assess the effectiveness of prone positioning to reduce the risk of death or respiratory failure in non-critically ill patients admitted to hospital with covid-19.

Design: Multicentre pragmatic randomised clinical trial.

Setting: 15 hospitals in Canada and the United States from May 2020 until May 2021.

Participants: Eligible patients had a laboratory confirmed or a clinically highly suspected diagnosis of covid-19, needed supplemental oxygen (up to 50% fraction of inspired oxygen), and were able to independently lie prone with verbal instruction. Of the 570 patients who were assessed for eligibility, 257 were randomised and 248 were included in the analysis.

Intervention: Patients were randomised 1:1 to prone positioning (that is, instructing a patient to lie on their stomach while they are in bed) or standard of care (that is, no instruction to adopt prone position).

Main outcome measures: The primary outcome was a composite of in-hospital death, mechanical ventilation, or worsening respiratory failure defined as needing at least 60% fraction of inspired oxygen for at least 24 hours. Secondary outcomes included the change in the ratio of oxygen saturation to fraction of inspired oxygen.

Results: The trial was stopped early on the basis of futility for the pre-specified primary outcome. The median time from hospital admission until randomisation was 1 day, the median age of patients was 56 (interquartile range 45-65) years, 89 (36%) patients were female, and 222 (90%) were receiving oxygen via nasal prongs at the time of randomisation. The median time spent prone in the first 72 hours was 6 (1.5-12.8) hours in total for the

prone arm compared with 0 (0-2) hours in the control arm. The risk of the primary outcome was similar between the prone group (18 (14%) events) and the standard care group (17 (14%) events) (odds ratio 0.92, 95% confidence interval 0.44 to 1.92). The change in the ratio of oxygen saturation to fraction of inspired oxygen after 72 hours was similar for patients randomised to prone positioning and standard of care.

Conclusion: Among non-critically ill patients with hypoxaemia who were admitted to hospital with covid-19, a multifaceted intervention to increase prone positioning did not improve outcomes. However, wide confidence intervals preclude definitively ruling out benefit or harm. Adherence to prone positioning was poor, despite multiple efforts to increase it. Subsequent trials of prone positioning should aim to develop strategies to improve adherence to awake prone positioning."

Clin Infect Dis: [Efficacy and Safety of Sarilumab in Hospitalized Patients With COVID-19: A Randomized Clinical Trial](#) (21 March 2022)

"Background: Open-label platform trials and a prospective meta-analysis suggest efficacy of anti-IL-6R therapies in hospitalized patients with COVID-19 receiving corticosteroids. This study evaluated the efficacy and safety of sarilumab, an anti-IL-6R monoclonal antibody, in the treatment of hospitalized patients with COVID-19.

Methods: In this adaptive, phase 2/3, randomized, double-blind, placebo-controlled trial, adults hospitalized with COVID-19 (ClinicalTrials.gov: NCT04315298) received intravenous sarilumab or placebo. The phase 3 primary analysis population included patients with critical COVID-19 receiving mechanical ventilation randomized to sarilumab 400 mg or placebo. The primary outcome was proportion of patients with ≥ 1 -point improvement in clinical status from baseline to day 22.

Results: There were 457 and 1365 patients randomized and treated in phases 2 and 3, respectively. In phase 3, patients with critical COVID-19 receiving mechanical ventilation ($n = 298$; 28.2% on corticosteroids), the proportion with ≥ 1 -point improvement in clinical status (alive, not receiving mechanical ventilation) at day 22 was 43.2% in sarilumab and 35.5% in placebo (risk difference +7.5%; 95% CI, -7.4 to 21.3; $P = .3261$), a relative risk improvement of 21.7%. In post-hoc analyses pooling phase 2 and 3 critical patients receiving mechanical ventilation, the hazard ratio for death in sarilumab versus placebo was 0.76 (95% CI, .51-1.13) overall and 0.49 (95% CI, .25-.94) in patients receiving corticosteroids at baseline.

Conclusions: This study did not establish the efficacy of sarilumab in hospitalized patients with severe/critical COVID-19. Post-hoc analyses were consistent with other studies that found a benefit of sarilumab in patients receiving corticosteroids."

JAMA: [Effect of Antiplatelet Therapy on Survival and Organ Support-Free Days in Critically Ill Patients With COVID-19: A Randomized Clinical Trial](#) (22 March 2022)

"Question: Does antiplatelet therapy administered to critically ill patients with COVID-19 improve organ support-free days (a composite end point of in-hospital mortality and duration of intensive care unit-based respiratory or cardiovascular support) up to day 21?

Findings: In this bayesian randomized clinical trial that included 1557 patients, antiplatelet therapy with either aspirin or a P2Y12 inhibitor, compared with no antiplatelet therapy, resulted in a 95.7% posterior probability of futility with regard to the odds of improvement in organ support-free days within 21 days.

Meaning: Among critically ill patients with COVID-19, there was a low likelihood that treatment with an antiplatelet agent provided improvement in organ support-free days within 21 days."

Trauma Surg Acute Care Open: [Serial rotational thromboelastography \(ROTEM\) in mechanically ventilated patients with COVID-19 demonstrates hypercoagulopathy despite therapeutic heparinization](#) (10 March 2022)

"Background: Clinical hypercoagulopathy in patients with COVID-19 has been anecdotally described, but there is lack of evidence due to the novelty of this disease. Our study reports the results of rotational thromboelastography (ROTEM) in relation to traditional laboratory coagulation tests and acute phase markers among a cohort of severely ill, mechanically ventilated patients with COVID-19.

Methods: Patients with COVID-19 (N=21) with respiratory failure requiring mechanical ventilation were included in this prospective case series. ROTEM was serially obtained for all patients on three different days during their intensive care unit (ICU) stay and analyzed using repeated measures analysis. Demographic variables, symptoms at the time of presentation, ROTEM values, laboratory values for traditionally measured coagulation profiles, and acute phase reactants were analyzed, in addition to the use of anticoagulation and clinical hypercoagulopathic complications.

Results: The average age of our cohort was 57.9 years old (SD=14.4) and 76.2% were male. The mortality rate was 14.3% (3 of 21). Two patients (12.5%) were identified to have new-onset deep vein thrombosis, two patients (12.5%) were found to have ≥ 3 episodes of central venous catheter thrombosis, and three patients (18.7%) had confirmed stroke. ROTEM demonstrated elevated EXTEM and INTEM clotting times, including elevated FIBTEM maximum clot firmness (MCFFIB). All patients treated with therapeutic anticoagulation still demonstrated hypercoagulopathy within the MCFFIB tests.

Discussion: Repeated measure ROTEMs were able to detect hypercoagulopathy in ICU patients with COVID-19 despite therapeutic anticoagulation with heparin."

Pre-Existing Conditions and Comorbidities

News in Brief

Long Reads

"The pandemic threatens their lives, even though they don't have covid — Millions of chronically ill people struggle to get medical supplies amid global shortages" ([WP](#)).

Journal Articles

JAMA Netw Open: [Racial Disparities in COVID-19 Outcomes Among Black and White Patients With Cancer](#) (28 March 2022)

"Question: Among patients with cancer and COVID-19, do non-Hispanic Black patients have more severe COVID-19 at presentation and worse COVID-19–related outcomes compared with non-Hispanic White patients, after adjusting for demographic and clinical risk factors?

Findings: In this cohort study of 3506 patients, Black patients with cancer experienced significantly more severe COVID-19 outcomes compared with White patients with cancer, after adjustment for demographic and clinical risk factors.

Meaning: These findings suggest that, within the framework of structural racism in the US, having cancer and COVID-19 is associated with worse outcomes among Black patients compared with White patients."

QJM: [Short- and long-term prognosis of glycemic control in COVID-19 patients with type 2 diabetes](#) (22 March 2022)

"Background and aim: To systematically evaluate the associations between glycemic control and short- to long-term outcomes in coronavirus disease 2019 (COVID-19) patients with type 2 diabetes (T2D).

Design and methods: A multi-center prospective cohort study including 574 COVID-19 patients with T2D was conducted in Wuhan, China. All patients were followed-up 1 year after hospital discharge using a uniformed questionnaire including self-reported symptoms, and the chronic obstructive pulmonary disease assessment test items.

Results: Of the 574 patients, 443 (77.2%) had well-controlled blood glucose. Glycemic control was significantly associated with decreased risk of death [odds ratio (OR) 0.24, 95% confidence interval (CI) 0.10-0.57], intensive care unit admission (OR 0.22, 95% CI 0.10-0.49), invasive mechanical ventilation (OR 0.25, 95% CI 0.08-0.72), disease progression (OR 0.25, 95% CI 0.11-0.55), and composite outcome (OR 0.26, 95% CI 0.14-0.49). The top five long-term sequelae include fatigue (31.5%), sweating (21.2%), chest tightness (15.1%),

anxiety (12.2%), myalgia (10.6%) and short breath (6.4%). Glycemic control was associated with decreased risk of respiratory sequelae (OR 0.42, 95% CI 0.18-0.99; P = 0.048).

Conclusions: Glycemic control was significantly associated with short-term outcomes in COVID-19 patients with T2D and showed a significant association with long-term respiratory sequelae. The management and control of blood glucose has a positive impact on prognosis of COVID-19."

Long COVID and Other Complications

News in Brief

"'A slow-moving glacier': NIH's sluggish and often opaque efforts to study long Covid draw patient, expert ire" ([STAT](#)).

"What drives post-COVID cognitive changes? New research hints at why COVID brain fog may persist" ([Medpage](#)).

"Evidence grows that vaccines lower the risk of getting long COVID" ([NPR](#)).

"Can drugs reduce the risk of long COVID? What scientists know so far" ([Nature](#)).

Long Reads

"How covid brain fog may overlap with 'chemo brain' and Alzheimer's: Researchers say the brain inflammation in long covid is similar to that in cancer patients" ([WP](#)).

Journal Articles

Diabetes Care: [The Incidence of Diabetes Among 2,777,768 Veterans With and Without Recent SARS-CoV-2 Infection](#) (01 April 2022)

"Objective: To examine associations of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection/coronavirus disease 2019 with incident diabetes.

Research design and methods: We conducted a retrospective cohort study using Veterans Health Administration data. We defined all patients without preexisting diabetes with one or more nasal swabs positive for SARS-CoV-2 (1 March 2020-10 March 2021; n = 126,710) as exposed and those with no positive swab and one or more laboratory tests (1 March 2020-31 March 2021; n = 2,651,058) as unexposed. The index date for patients exposed was the date of first positive swab and for patients unexposed a random date during the month of the qualifying laboratory test. We fit sex-stratified logistic regression models examining

associations of SARS-CoV-2 with incident diabetes within 120 days and all follow-up time through 1 June 2021. A subgroup analysis was performed among hospitalized subjects only to help equalize laboratory surveillance.

Results: SARS-CoV-2 was associated with higher risk of incident diabetes, compared with no positive tests, among men (120 days, odds ratio [OR] 2.56 [95% CI 2.32-2.83]; all time, 1.95 [1.80-2.12]) but not women (120 days, 1.21 [0.88-1.68]; all time, 1.04 [0.82-1.31]). Among hospitalized participants, SARS-CoV-2 was associated with higher risk of diabetes at 120 days and at the end of follow-up in men (OR 1.42 [95% CI 1.22-1.65] and 1.32 [1.16-1.50], respectively) but not women (0.72 [0.34-1.52] and 0.80 [0.44-1.45]). Sex * SARS-CoV-2 interaction P values were all <0.1.

Conclusions: SARS-CoV-2 is associated with higher risk of incident diabetes in men but not in women even after greater surveillance related to hospitalization is accounted for."

Influenza Other Respir Viruses: [Associations between persistent symptoms after mild COVID-19 and long-term health status, quality of life, and psychological distress](#) (28 March 2022)

"Background: We sought to assess whether persistent COVID-19 symptoms beyond 6 months (Long-COVID) among patients with mild COVID-19 is associated with poorer health status, quality of life, and psychological distress.

Methods: This was a multicenter prospective cohort study that included adult outpatients with acute COVID-19 from eight sites during 2-week sampling periods from April 1 and July 28, 2020. Participants were contacted 6-11 months after their first positive SARS-CoV-2 to complete a survey, which collected information on the severity of eight COVID-19 symptoms using a 4-point scale ranging from 0 (not present) to 3 (severe) at 1 month before COVID-19 (pre-illness) and at follow-up; the difference for each was calculated as an attributable persistent symptom severity score. A total attributable persistent COVID-19 symptom burden score was calculated by summing the attributable persistent severity scores for all eight symptoms. Outcomes measured at long-term follow-up comprised overall health status (EuroQol visual analogue scale), quality of life (EQ-5D-5L), and psychological distress (Patient Health Questionnaire-4). The association between the total attributable persistent COVID-19 burden score and each outcome was analyzed using multivariable proportional odds regression.

Results: Of the 2092 outpatients with COVID-19, 436 (21%) responded to the survey. The median (IQR) attributable persistent COVID-19 symptom burden score was 2 (0, 4); higher scores were associated with lower overall health status (aOR 0.63; 95% CI: 0.57-0.69), lower quality of life (aOR: 0.65; 95%CI: 0.59-0.72), and higher psychological distress (aOR: 1.40; 95%CI, 1.28-1.54) after adjusting for age, race, ethnicity, education, and income.

Conclusions: In participants with mild acute COVID-19, the burden of persistent symptoms was significantly associated with poorer long-term health status, poorer quality of life, and psychological distress."

Clin Microbiol Infect: [Post-COVID-19 syndrome and humoral response association after one year in vaccinated and unvaccinated patients](#) (22 March 2022)

"Objectives: To describe the impact of vaccination and the role of humoral responses on post-coronavirus disease 2019 (COVID-19) syndrome one year after the onset of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Methods: A prospective study. Interviews investigated post-COVID-19 syndrome 6 and 12 months after the disease onset of all adult in- and outpatients with COVID-19 attending Udine Hospital (March-May 2020). Vaccination status and two different serological assays to distinguish between response to vaccination (receptor-binding domain -RBD SARS-CoV-2 IgG) and/or natural infection (non-RBD- SARS-CoV-2 IgG) were also assessed.

Results: 479 individuals (52.6% female, mean age 53 years) were interviewed 13.5 months (0.6 SD) after acute infection. Post-COVID-19 syndrome was observed in 47.2% (226/479) of patients after one year. There were no significant differences in the worsening of post-COVID 19 symptoms (22.7% vs 15.8%, $p = 0.209$) among vaccinated ($n=132$) and unvaccinated ($n=347$) patients. The presence of non-RBD SARS-CoV-2 IgG induced by natural infection showed a significant association with post-COVID-19 syndrome (OR 1.35, 95% CI 1.11-1.64, $p = 0.003$), and median non-RBD SARS-CoV-2 IgG titres were significantly higher in long-haulers than in patients without symptoms 22 (IQR 9.7-37.2) vs 14.1 (IQR 5.4-31.3) kAU/L, $p = 0.009$) after one year. In contrast, the presence of RBD SARS-CoV-2 IgG was not associated with the occurrence of post-COVID-19 syndrome (>2500 U/mL vs 0.9-2500 U/mL, OR 1.36, 95% CI 0.62-3.00, $p = 0.441$) and RBD SARS-CoV-2 IgG titres were similar in long-haulers than in patients without symptoms (50% values > 2500 U/mL vs 55.6% values > 2500 U/mL, $p = 0.451$) CONCLUSIONS: The SARS-CoV-2 vaccination is not associated with the emergence of post-COVID-19 symptoms over one year after acute infection. The persistence of high serological titres response induced by natural infection but not by vaccination, may play a role in long-COVID-19."

Lancet Diabetes Endocrinol: [Risks and burdens of incident diabetes in long COVID: a cohort study](#) (21 March 2022)

"Background: There is growing evidence suggesting that beyond the acute phase of SARS-CoV-2 infection, people with COVID-19 could experience a wide range of post-acute sequelae, including diabetes. However, the risks and burdens of diabetes in the post-acute phase of the disease have not yet been comprehensively characterised. To address this knowledge gap, we aimed to examine the post-acute risk and burden of incident diabetes in people who survived the first 30 days of SARS-CoV-2 infection.

Methods: In this cohort study, we used the national databases of the US Department of Veterans Affairs to build a cohort of 181 280 participants who had a positive COVID-19 test between March 1, 2020, and Sept 30, 2021, and survived the first 30 days of COVID-19; a contemporary control (n=4 118 441) that enrolled participants between March 1, 2020, and Sept 30, 2021; and a historical control (n=4 286 911) that enrolled participants between March 1, 2018, and Sept 30, 2019. Both control groups had no evidence of SARS-CoV-2 infection. Participants in all three comparison groups were free of diabetes before cohort entry and were followed up for a median of 352 days (IQR 245-406). We used inverse probability weighted survival analyses, including predefined and algorithmically selected high dimensional variables, to estimate post-acute COVID-19 risks of incident diabetes, antihyperglycaemic use, and a composite of the two outcomes. We reported two measures of risk: hazard ratio (HR) and burden per 1000 people at 12 months.

Findings: In the post-acute phase of the disease, compared with the contemporary control group, people with COVID-19 exhibited an increased risk (HR 1.40, 95% CI 1.36-1.44) and excess burden (13.46, 95% CI 12.11-14.84, per 1000 people at 12 months) of incident diabetes; and an increased risk (1.85, 1.78-1.92) and excess burden (12.35, 11.36-13.38) of incident antihyperglycaemic use. Additionally, analyses to estimate the risk of a composite endpoint of incident diabetes or antihyperglycaemic use yielded a HR of 1.46 (95% CI 1.43-1.50) and an excess burden of 18.03 (95% CI 16.59-19.51) per 1000 people at 12 months. Risks and burdens of post-acute outcomes increased in a graded fashion according to the severity of the acute phase of COVID-19 (whether patients were non-hospitalised, hospitalised, or admitted to intensive care). All the results were consistent in analyses using the historical control as the reference category.

Interpretation: In the post-acute phase, we report increased risks and 12-month burdens of incident diabetes and antihyperglycaemic use in people with COVID-19 compared with a contemporary control group of people who were enrolled during the same period and had not contracted SARS-CoV-2, and a historical control group from a pre-pandemic era. Post-acute COVID-19 care should involve identification and management of diabetes."

Pregnancy and Postpartum Period

News in Brief

"Pregnant people at much higher risk of breakthrough covid, study shows" ([WP](#); see also: [study abstract](#)).

Journal Articles

JAMA: [Association of SARS-CoV-2 Vaccination During Pregnancy With Pregnancy Outcomes](#) (24 March 2022)

"Questions: Is SARS-CoV-2 vaccination during pregnancy associated with adverse pregnancy outcomes?

Findings: In this population-based retrospective cohort study that included 157 521 deliveries in Sweden and Norway, SARS-CoV-2 vaccination during pregnancy, compared with no SARS-CoV-2 vaccination during pregnancy, was not significantly associated with risk of preterm birth (adjusted hazard ratio [aHR], 0.98), stillbirth (aHR, 0.86), small for gestational age (adjusted odds ratio [aOR], 0.97), low Apgar score (aOR, 0.97), or neonatal care admission (aOR, 0.97).

Meaning: In this population-based study conducted in Sweden and Norway, vaccination against SARS-CoV-2 during pregnancy was not associated with an increased risk of adverse pregnancy outcomes."

JAMA: [Association of COVID-19 Vaccination in Pregnancy With Adverse Peripartum Outcomes](#) (24 March 2022)

"Question: Is COVID-19 vaccination during pregnancy associated with adverse peripartum outcomes?

Findings: In this population-based retrospective cohort study of 97 590 individuals in Ontario, Canada, COVID-19 vaccination during pregnancy, compared with vaccination after pregnancy and with no vaccination, was not significantly associated with increased risk of postpartum hemorrhage, chorioamnionitis, cesarean delivery, admission to neonatal intensive care unit, or low newborn 5-minute Apgar score.

Meaning: COVID-19 vaccination during pregnancy was not significantly associated with an increased risk of adverse peripartum outcomes."

JAMA: [COVID-19 Cases and Disease Severity in Pregnancy and Neonatal Positivity Associated With Delta \(B.1.617.2\) and Omicron \(B.1.1.529\) Variant Predominance](#) (24 March 2022)

"This study examines infections, illness severity, vaccinations, and early neonatal infections among obstetric patients during the pre-Delta, Delta, and Omicron periods of the COVID-19 pandemic....

As in nonpregnant people, Delta and Omicron variant predominance were associated with increased SARS-CoV-2 infections in pregnancy, with the majority occurring in unvaccinated individuals. Delta variant predominance was associated with increased illness severity and Omicron with decreased illness severity after adjusting for prior vaccination. The majority of

early neonatal SARS-CoV-2 infections occurred among unvaccinated mothers with nonsevere COVID-19. Long-term risks of early neonatal SARS-CoV-2 infection are unknown, but maternal vaccination may be protective."

JAMA Intern Med: [Perinatal Complications in Individuals in California With or Without SARS-CoV-2 Infection During Pregnancy](#) (21 March 2022)

"Question: What is the risk of perinatal complications associated with SARS-CoV-2 infection during pregnancy and what factors are associated with hospitalizations?

Findings: In this cohort study of 43 886 pregnant individuals, SARS-CoV-2 infection during pregnancy was associated with an increased risk of severe maternal morbidity, preterm birth, and venous thromboembolism. Pregestational diabetes and Asian or Pacific Islander and Black race and ethnicity were associated with an increased risk of hospitalization.

Meaning: This study found that SARS-CoV-2 infection may be associated with an increased risk of perinatal complications; this information can help inform treatment of the infection during pregnancy, aid patients in understanding the risks of these complications, and support the recommendation for vaccination of pregnant individuals and those planning conception."

JAMA Netw Open: [SARS-CoV-2 Placentitis and Intraparenchymal Thrombohematomas Among COVID-19 Infections in Pregnancy](#) (21 March 2022)

"This cases series examines SARS-CoV-2 placentitis and intraparenchymal thrombohematomas among COVID-19 infections during pregnancy....

We describe a severe form of SARS-CoV-2 placentitis with thrombohematomas occurring primarily in stillbirths from pregnancies complicated by SARS-CoV-2 infection during the 2021 pandemic wave. This pathology is distinctive and grossly identifiable, representing a change in the spectrum of SARS-CoV-2 pregnancy complications.^{1,2} The thrombohematomas are likely a result of severe viral placental damage. Our findings suggest a pathogenetic mechanism for the reported increased risk of stillbirth associated with SARS-CoV-2 infection in 2021."

Pediatric Population

News in Brief

"Moderna to ask FDA to authorize Covid-19 vaccine in children 6 months to 6 years" ([STAT](#)).

"Why kids' COVID-vaccine results don't look like adults" ([Atlantic](#)).

Journal Articles

The latest MMWR Supplement [[pdf full issue](#)] focuses on Adolescent Behaviors and Experiences Survey – United States, January–June 2021 (01 April 2022):

- [Overview and Methodology of the Adolescent Behaviors and Experiences Survey — United States, January–June 2021](#)
- [Use of Tobacco Products, Alcohol, and Other Substances Among High School Students During the COVID-19 Pandemic — Adolescent Behaviors and Experiences Survey, United States, January–June 2021](#)
- [Mental Health, Suicidality, and Connectedness Among High School Students During the COVID-19 Pandemic — Adolescent Behaviors and Experiences Survey, United States, January–June 2021](#)
- [Perceived Racism and Demographic, Mental Health, and Behavioral Characteristics Among High School Students During the COVID-19 Pandemic — Adolescent Behaviors and Experiences Survey, United States, January–June 2021](#)
- [Disruptions to School and Home Life Among High School Students During the COVID-19 Pandemic — Adolescent Behaviors and Experiences Survey, United States, January–June 2021](#)

NEJM: [Overcoming Covid-19 Investigators. BNT162b2 Protection against the Omicron Variant in Children and Adolescents](#) (30 March 2022)

"Background: Spread of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) B.1.1.529 (omicron) variant, which led to increased U.S. hospitalizations for coronavirus disease 2019 (Covid-19), generated concern about immune evasion and the duration of protection from vaccines in children and adolescents.

Methods: Using a case-control, test-negative design, we assessed vaccine effectiveness against laboratory-confirmed Covid-19 leading to hospitalization and against critical Covid-19 (i.e., leading to receipt of life support or to death). From July 1, 2021, to February 17, 2022, we enrolled case patients with Covid-19 and controls without Covid-19 at 31 hospitals in 23 states. We estimated vaccine effectiveness by comparing the odds of antecedent full vaccination (two doses of BNT162b2 messenger RNA vaccine) at least 14 days before illness among case patients and controls, according to time since vaccination for patients 12 to 18 years of age and in periods coinciding with circulation of B.1.617.2 (delta) (July 1, 2021, to December 18, 2021) and omicron (December 19, 2021, to February 17, 2022) among patients 5 to 11 and 12 to 18 years of age.

Results: We enrolled 1185 case patients (1043 [88%] of whom were unvaccinated, 291 [25%] of whom received life support, and 14 of whom died) and 1627 controls. During the delta-predominant period, vaccine effectiveness against hospitalization for Covid-19 among adolescents 12 to 18 years of age was 93% (95% confidence interval [CI], 89 to 95) 2 to 22

weeks after vaccination and was 92% (95% CI, 80 to 97) at 23 to 44 weeks. Among adolescents 12 to 18 years of age (median interval since vaccination, 162 days) during the omicron-predominant period, vaccine effectiveness was 40% (95% CI, 9 to 60) against hospitalization for Covid-19, 79% (95% CI, 51 to 91) against critical Covid-19, and 20% (95% CI, -25 to 49) against noncritical Covid-19. During the omicron period, vaccine effectiveness against hospitalization among children 5 to 11 years of age was 68% (95% CI, 42 to 82; median interval since vaccination, 34 days).

Conclusions: BNT162b2 vaccination reduced the risk of omicron-associated hospitalization by two thirds among children 5 to 11 years of age. Although two doses provided lower protection against omicron-associated hospitalization than against delta-associated hospitalization among adolescents 12 to 18 years of age, vaccination prevented critical illness caused by either variant."

JAMA Netw Open: [Outcomes After SARS-CoV-2 Vaccination Among Children With a History of Multisystem Inflammatory Syndrome](#) (28 March 2022)

"This case series evaluates the outcomes following COVID-19 vaccination in patients previously diagnosed with multisystem inflammatory syndrome in children at children's hospitals in Texas and Italy....

In this study, 15 patients treated for MIS-C after COVID-19 tolerated vaccination against SARS-CoV-2 without developing hyperinflammation, myocarditis, or reoccurrence of MIS-C up to 9.5 months after vaccination. This study provides critical information while the COVID-19 pandemic continues now that SARS-CoV-2 vaccination is available to children in the age range most at risk of developing MIS-C."

JAMA Pediatr: [Short-term Outcomes of Corticosteroid Monotherapy in Multisystem Inflammatory Syndrome in Children](#) (28 March 2022)

"Question: Is corticosteroid monotherapy a viable treatment alternative for multisystem inflammatory syndrome in children (MIS-C)?

Findings: In this cohort study, patients receiving corticosteroids as initial management had similar rates of treatment failure compared with those receiving intravenous immunoglobulin plus corticosteroids, after adjusting for baseline presentation and disease severity; in the latter group, therapy failure due to laboratory parameters was more likely while failure due to cardiac parameters was less likely. Inpatient stay and corticosteroid course duration were shorter in patients initially treated with corticosteroid monotherapy.

Meaning: In this study, corticosteroid monotherapy successfully treated a subset of patients with mild MIS-C."

JCI Insight: [Binding and neutralizing antibody responses to SARS-CoV-2 in young children exceed those in adults](#) (22 March 2022)

"Background: SARS-CoV-2 infections are frequently milder in children than adults, suggesting that immune responses may vary with age. However, information is limited regarding SARS-CoV-2 immune responses in young children.

Methods: We compared Receptor Binding Domain binding antibody (RBDAb) titers and SARS-CoV-2 neutralizing antibody titers measured by pseudovirus neutralizing antibody assay (PsVNA) in serum specimens obtained from children aged 0-4 years, 5-17 years, and in adults aged 18-62 years at the time of enrollment in a prospective longitudinal household study of SARS-CoV-2 infection.

Results: Among 56 participants seropositive at enrollment, children aged 0-4 years had >10-fold higher RBDAb titers than adults (416 vs. 31, $P < 0.0001$), and the highest RBDAb titers in 11/12 households with seropositive children and adults. Children aged 0-4 years had only 2-fold higher neutralizing Ab than adults, resulting in higher binding to neutralizing (B/N) Ab ratios compared to adults (2.36 vs. 0.35 for ID50, $P = 0.0002$).

Conclusions: These findings suggest that young children mount robust antibody responses to SARS-CoV-2 following community infections. Additionally, these results support using neutralizing Ab to measure the immunogenicity of COVID-19 vaccines in children aged 0-4 years."

Healthcare Workers

News in Brief

"Pushed to their limits, 1 in 5 physicians intends to leave practice" ([JAMA](#)).

"'I fear the long-term effects': Before his death, a nurse warned of the pandemic's toll on health care workers" ([STAT](#)).

Journal Articles

Clin Infect Dis: [Utility of Follow-up COVID-19 Antigen Tests After Acute SARS-CoV-2 Infection Among Healthcare Personnel](#) (30 March 2022)

"We report the utility of rapid antigen tests (RAgT) in a cohort of US healthcare personnel with COVID-19 infection who met symptom criteria to return to work at day 5 or later of

isolation. 11.9% of initial RAgT were negative. RAgT can be helpful to guide return to work decisions."

Disaster Med Public Health Prep: [Depression among medical students in the United States during the COVID-19 pandemic: The role of communication between universities and their students](#) (04 March 2022)

"Objective: Medical students are vulnerable to stress and depression during medical school, and the COVID-19 pandemic may have exacerbated these issues. This study examined whether depression risk was associated with COVID-19 pandemic-related medical school communication.

Methods: A 144-item pilot cross-sectional online survey of medical students in the US, between September 1st, 2020 and December 31st, 2020. Items on stress, depression, and communication between students and their medical schools were included. This study examined associations of student perceptions of universities' communication efforts and pandemic response with risk of developing depression.

Results: The sample included 212 students from 22 US states. Almost half (48.6%) were at risk of developing depression. Students felt medical schools transitioned well to online platforms and the curriculum was just as rigorous as in-person courses. Students at risk of developing depression reported communication was poor more frequently compared to students at average risk. Students at risk of depression were more than 3 times more likely to report their universities' communication about scholarships or other funding was poor in adjusted analyses.

Conclusions: Universities communicated well with medical students during the pandemic. However, this study also highlights the need for ongoing efforts to address student mental health by medical schools."

Disparities and Health Equity

News in Brief

"Covid-19 pandemic isn't over for Black Americans, report warns" ([STAT](#); see also: [Black Coalition Against COVID report](#), noted below).

"'The danger is still there' — as omicron lurks, Native Americans are wary of boosters" ([KHN](#)).

Special Reports and Other Resources

BCAC: [The State Of Black America And Covid-19: A Two-Year Assessment](#) (29 March 2022)

"As we reflect on two years of lived experience and myriad data sources, we know COVID-19's toll on Black Americans is ongoing. This report draws attention to the continued disproportionate burden experienced by members of the Black community and will help guide advocacy and policy efforts to address these inequities—both during the current pandemic and beyond.

This report shares the arc of the pandemic for Black Americans, highlights areas for immediate focus and attention, and presents a set of expert-generated recommendations for action. Given generations of systemic disinvestment in the health of Black communities in the United States, the starkly disproportionate rates of COVID-19 illness and death are not surprising. This report situates alarming pandemic-related disparities within these deeper societal inequities, and provides guidance to move towards sustained change."

Journal Articles

BMC Infect Dis: [The association between a lifestyle score, socioeconomic status, and COVID-19 outcomes within the UK Biobank cohort](#) (30 March 2022)

"Background: Infection with SARS-CoV-2 virus (COVID-19) impacts disadvantaged groups most. Lifestyle factors are also associated with adverse COVID-19 outcomes. To inform COVID-19 policy and interventions, we explored effect modification of socioeconomic-status (SES) on associations between lifestyle and COVID-19 outcomes.

Methods: Using data from UK-Biobank, a large prospective cohort of 502,536 participants aged 37-73 years recruited between 2006 and 2010, we assigned participants a lifestyle score comprising nine factors. Poisson regression models with penalised splines were used to analyse associations between lifestyle score, deprivation (Townsend), and COVID-19 mortality and severe COVID-19. Associations between each exposure and outcome were examined independently before participants were dichotomised by deprivation to examine exposures jointly. Models were adjusted for sociodemographic/health factors.

Results: Of 343,850 participants (mean age > 60 years) with complete data, 707 (0.21%) died from COVID-19 and 2506 (0.76%) had severe COVID-19. There was evidence of a nonlinear association between lifestyle score and COVID-19 mortality but limited evidence for nonlinearity between lifestyle score and severe COVID-19 and between deprivation and COVID-19 outcomes. Compared with low deprivation, participants in the high deprivation group had higher risk of COVID-19 outcomes across the lifestyle score. There was evidence for an additive interaction between lifestyle score and deprivation. Compared with

participants with the healthiest lifestyle score in the low deprivation group, COVID-19 mortality risk ratios (95% CIs) for those with less healthy scores in low versus high deprivation groups were 5.09 (1.39-25.20) and 9.60 (4.70-21.44), respectively. Equivalent figures for severe COVID-19 were 5.17 (2.46-12.01) and 6.02 (4.72-7.71). Alternative SES measures produced similar results.

Conclusions: Unhealthy lifestyles are associated with higher risk of adverse COVID-19, but risks are highest in the most disadvantaged, suggesting an additive influence between SES and lifestyle. COVID-19 policy and interventions should consider both lifestyle and SES. The greatest public health benefit from lifestyle focussed COVID-19 policy and interventions is likely to be seen when greatest support for healthy living is provided to the most disadvantaged groups."

JAMA Netw Open: [In-Hospital Mortality Disparities Among American Indian and Alaska Native, Black, and White Patients With COVID-19](#) (30 March 2022)

"Question: Are the higher in-hospital mortality rates for COVID-19 among American Indian and Alaska Native patients compared with other racial groups associated with differences in comorbidity burden?

Findings: In this cross-sectional study of 18 731 US adults hospitalized with COVID-19 in 2020, American Indian and Alaska Native patients had a lower mean comorbidity risk score compared with the overall patient population, yet they were significantly more likely than patients of all other races to die in the hospital. Increased COVID-19 in-hospital deaths among American Indian and Alaska Native adults were not associated with increased comorbidity experiences in all populations.

Meaning: These findings suggest that alternative factors contributing to disparate in-hospital mortality rates among Indigenous communities must be investigated further."

See also: [Commentary](#)

Soc Sci Med: [Highlighting COVID-19 racial disparities can reduce support for safety precautions among White U.S. residents](#) (29 March 2022)

"U.S. media has extensively covered racial disparities in COVID-19 infections and deaths, which may ironically reduce public concern about COVID-19. In two preregistered studies (conducted in the fall of 2020), we examined whether perceptions of COVID-19 racial disparities predict White U.S. residents' attitudes toward COVID-19. Utilizing a correlational design (N = 498), we found that those who perceived COVID-19 racial disparities to be greater reported reduced fear of COVID-19, which predicted reduced support for COVID-19 safety precautions. In Study 2, we manipulated exposure to information about COVID-19 racial disparities (N = 1,505). Reading about the persistent inequalities that produced COVID-19 racial disparities reduced fear of COVID-19, empathy for those vulnerable to

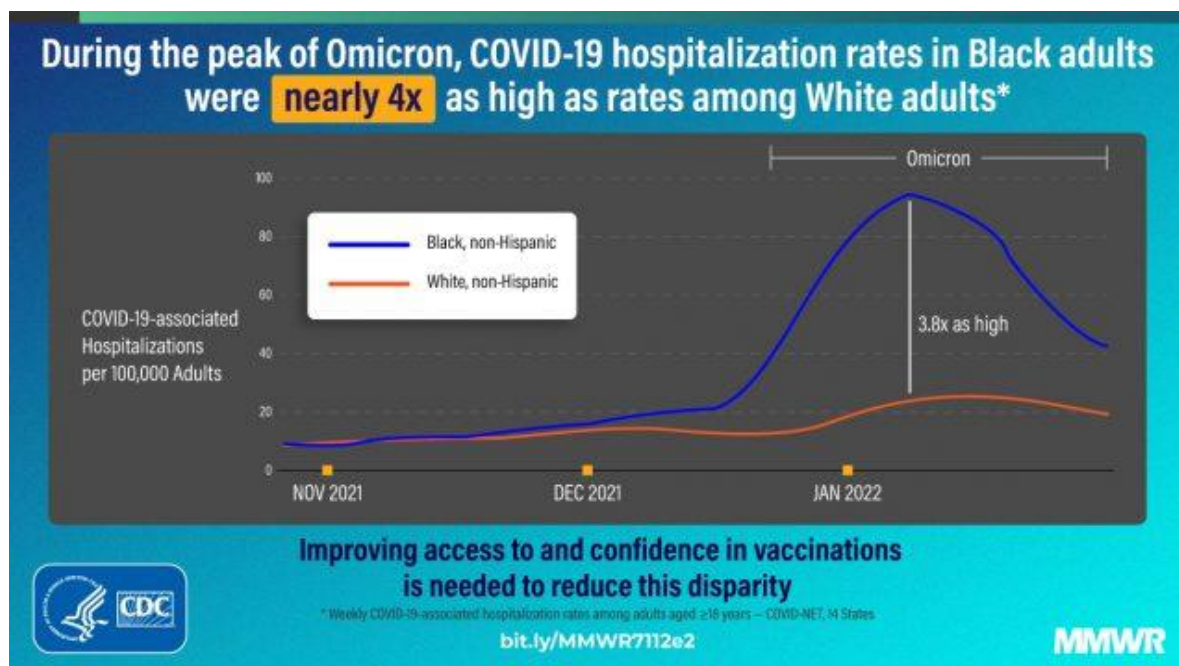
COVID-19, and support for safety precautions. These findings suggest that publicizing racial health disparities has the potential to create a vicious cycle wherein raising awareness reduces support for the very policies that could protect public health and reduce disparities."

MMWR: [COVID-19—Associated Hospitalizations Among Adults During SARS-CoV-2 Delta and Omicron Variant Predominance, by Race/Ethnicity and Vaccination Status — COVID-NET, 14 States, July 2021–January 2022](#) (25 March 2022)

"What is already known about this topic? SARS-CoV-2 infections can result in COVID-19–associated hospitalizations, even among vaccinated persons.

What is added by this report? In January 2022, unvaccinated adults and those vaccinated with a primary series, but no booster or additional dose, were 12 and three times as likely to be hospitalized, respectively, as were adults who received booster or additional doses. Hospitalization rates among non-Hispanic Black adults increased more than rates in other racial/ethnic groups.

What are the implications for public health practice? All adults should stay up to date with COVID-19 vaccination to reduce their risk for COVID-19–associated hospitalization. Implementing strategies that result in the equitable receipt of COVID-19 vaccinations among persons with disproportionately higher hospitalizations rates, including non-Hispanic Black adults, is an urgent public health priority."



Behav Med: [Racism, Posttraumatic Stress Symptoms, and Racial Disparity in the U.S. COVID-19 Syndemic](#) (23 March 2022)

"The COVID-19 syndemic, with a disproportionately higher adverse impact on communities of color (i.e., COVID-19 infection and death), will likely exacerbate the existing health disparities in trauma-related symptoms between people of color (POC) and White Americans. However, no studies have examined the racial disparity in posttraumatic stress symptoms (PTSS) during COVID-19. Grounded in ecological theory and racial trauma framework, we investigated racial disparity in PTSS and three possible mechanisms, 1) COVID stress, 2) direct racism, and 3) indirect racism, for these disparities using a large U.S. national sample. Results indicated that POC reported higher levels of PTSS than White Americans. The PTSS racial disparity was accounted more by direct and indirect racism than by the COVID-19-specific stressors, after controlling for age, gender, education, income, parent status, adverse childhood experiences (ACEs), and intimate partner violence (IPV). Additional fine-grained analyses for Hispanic/Latinx Americans, Black/African Americans, and Asian American and Pacific Islanders by and large corroborated the above findings. Our findings highlighted the deleterious impact of the ongoing racism pandemic on the POC community as a public health crisis in addition to the COVID-19 pandemic."

Special Topic: Intimate Partner Violence

See also: [NMCP COVID-19 Report #14 \(15 May 2020\)](#), which includes a summary on home-based violence and abuse (note: has not been updated with more recent literature).

Journal Articles

Acad Pediatr: [Supporting children experiencing family violence during the COVID-19 pandemic: IPV and CPS provider perspectives](#) (24 March 2022)

"Objectives: Children experiencing family violence (child abuse and neglect and exposure to intimate partner violence) are at a particularly elevated risk for compounding challenges during the COVID-19 pandemic. In this study, we interviewed intimate partner violence (IPV) advocates, child protective services (CPS) caseworkers, and IPV and CPS administrators on the needs of children experiencing family violence during the pandemic.

Methods: We conducted semi-structured interviews with IPV advocates, CPS caseworkers, and IPV and CPS administrators. Recruitment occurred through emails to national and state listservs, networks of the study team, and word of mouth. Interviews were completed

through Zoom, took 45 to 60 minutes and were audio recorded. We used a mixed deductive-inductive content analysis approach.

Results: Fifty-nine IPV advocates, 35 IPV administrators, 21 CPS workers and 16 CPS administrators participated in this study. Four themes emerged from this work. Participants discussed the role of social isolation, school closures, and distance learning on children experiencing family violence. They also noted child custody and visitation challenges, particularly in the context of abusive partners using custody to control IPV survivors and limitations to virtual visitation more broadly. Compounding challenges were described for children from marginalized communities due to structural-level inequities. Collaboration was discussed by participants from both IPV and CPS sectors.

Conclusion: This study is one of the first to describe the way the COVID-19 pandemic has impacted children experiencing family violence. Future studies should triangulate these results with children, families, and other child-serving providers."

Pediatrics: [Intimate Partner Violence and the COVID-19 Pandemic](#) (22 March 2022)

"OBJECTIVE: To describe the effects of the COVID-19 pandemic and associated practice shifts on consultation and referral patterns of an intimate partner violence (IPV) program at a large, urban children's hospital.

METHODS: Secondary data analyses examined COVID-19-related variations in patterns of consultations and referrals in the 11 months prior to the COVID-19 pandemic (April 1, 2019-February 29, 2020) and those following its emergence (April 1, 2020-February 28, 2021). Chi square analyses were used to examine differences in categorical outcomes of interest by time and practice setting as well as differences within practice settings. Poisson regressions were used to compare the number of reasons for consultation and the number of referrals during the two periods.

RESULTS: Analyses revealed significant decreases in face-to-face consults (28% to 2%; $p<.001$) during the period following COVID-19 emergence alongside significant increases in the total number of consults (240 to 295; $p<.001$), primarily for emotional abuse (195 to 264; $p=.007$). Psychoeducation referrals also increased significantly (199 to 273; $p<.001$), while referrals to community resources decreased significantly (111 to 95; $p<.001$). Setting-specific analyses revealed that primary care settings were the only practice settings to demonstrate significant differences in overall number of and specific reasons for consultation, and associated referral types before and after COVID emergence.

CONCLUSION: Even during a shift away from face-to-face care, there was an increase in IPV referrals after the start of the COVID-19 pandemic. These findings suggest the importance of pediatric primary care as a location for survivors to access support."

See also: [commentary](#)

Psychol Violence: [Intimate Partner Aggression During the COVID-19 Pandemic: Associations With Stress and Heavy Drinking](#) (March 2022)

"Objective: This study aimed to test empirically whether (1) the local impact of the COVID-19 pandemic was associated with increases in intimate partner aggression (IPA) and heavy drinking, and (2) heavy drinking moderated the association between COVID-19 stress and IPA perpetration.

Method: Participants were 510 individuals (approximately 50% who endorsed a sexual or gender minority identity) recruited via Qualtrics Research Services in April 2020, during the height of shelter-in-place (SiP) restrictions across the United States. They completed a questionnaire battery that included measures of COVID-19 stressors, physical and psychological IPA perpetration, and heavy drinking.

Results: Rates of physical and psychological IPA perpetration significantly increased after implementation of SiP restrictions which aimed to mitigate the transmission of COVID-19. COVID-19 stress was significantly and positively associated with physical and psychological IPA perpetration; however, COVID-19 stress was positively associated with physical IPA perpetration among non-heavy drinking, but not heavy drinking, participants.

Conclusions: Drawn from a large sample of participants of diverse sexual identities, findings tentatively implicate COVID-19 stress as a critical correlate of IPA perpetration and suggest that "low risk" individuals (i.e., non-heavy drinkers) should not be overlooked. These data provide preliminary support for the usefulness of public health polices and individual-level interventions that target stress, heavy drinking, and their antecedents."

Int J Environ Res Public Health: [Couple Conflict and Intimate Partner Violence during the Early Lockdown of the Pandemic: The Good, the Bad, or Is It Just the Same in a North Carolina, Low-Resource Population?](#) (24 February 2022)

"The COVID-19 pandemic has forced couples to navigate illness-related stressors and unique public health responses, including extended lockdowns. This study focused on under-resourced North Carolina residents (n = 107) who self-reported changes in relationship conflict (Increased, Decreased, Stayed the Same) and intimate partner violence (IPV) during the pandemic. We expected high rates of increased conflict and IPV since the start of the pandemic. We then sought to determine the associations between dyadic changes in conflict and reports of IPV and pandemic-related experiences and responses. Participants completed a brief online survey assessing their demographics, COVID-19 exposure/stressors, and pandemic responses. As expected, reports of increased couple conflict were related to difficulties getting needed social support, loss of health insurance, more fear and worry, stress, pain, and greater use of alcohol and/or illicit drugs, related to the coronavirus. Participants reporting increased conflict were also more likely to be unemployed. Conversely, reports of decreased conflict were associated with being ill from

the virus (48.9%), having health insurance, and working part time. Substantial amounts of IPV were reported (62.2% of the sample); however, increased conflict and IPV were unrelated. Those reporting No IPV were less likely to be receiving public assistance but more likely to have home responsibilities due to the virus. They also reported increased social interactions and less use of alcohol than those reporting IPV perpetration. Findings highlight key associations among pandemic experiences and responses, IPV, and couple functioning in an under-resourced sample. Efforts to facilitate coping, resilience, and tolerating uncertainty may facilitate cooperative and safe couple functioning throughout the pandemic."

Lancet: [Global, regional, and national prevalence estimates of physical or sexual, or both, intimate partner violence against women in 2018](#) (16 February 2022)

"Background: Intimate partner violence against women is a global public health problem with many short-term and long-term effects on the physical and mental health of women and their children. The Sustainable Development Goals (SDGs) call for its elimination in target 5.2. To monitor governments' progress towards SDG target 5.2, this study aimed to provide global, regional, and country baseline estimates of physical or sexual, or both, violence against women by male intimate partners.

Methods: This study developed global, regional, and country estimates, based on data from the WHO Global Database on Prevalence of Violence Against Women. These data were identified through a systematic literature review searching MEDLINE, Global Health, Embase, Social Policy, and Web of Science, and comprehensive searches of national statistics and other websites. A country consultation process identified additional studies. Included studies were conducted between 2000 and 2018, representative at the national or sub-national level, included women aged 15 years or older, and used act-based measures of physical or sexual, or both, intimate partner violence. Non-population-based data, including administrative data, studies not generalisable to the whole population, studies with outcomes that only provided the combined prevalence of physical or sexual, or both, intimate partner violence with other forms of violence, and studies with insufficient data to allow extrapolation or imputation were excluded. We developed a Bayesian multilevel model to jointly estimate lifetime and past year intimate partner violence by age, year, and country. This framework adjusted for heterogeneous age groups and differences in outcome definition, and weighted surveys depending on whether they were nationally or sub-nationally representative. This study is registered with PROSPERO (number CRD42017054100).

Findings: The database comprises 366 eligible studies, capturing the responses of 2 million women. Data were obtained from 161 countries and areas, covering 90% of the global population of women and girls (15 years or older). Globally, 27% (uncertainty interval [UI] 23-31%) of ever-partnered women aged 15-49 years are estimated to have experienced

physical or sexual, or both, intimate partner violence in their lifetime, with 13% (10-16%) experiencing it in the past year before they were surveyed. This violence starts early, affecting adolescent girls and young women, with 24% (UI 21-28%) of women aged 15-19 years and 26% (23-30%) of women aged 19-24 years having already experienced this violence at least once since the age of 15 years. Regional variations exist, with low-income countries reporting higher lifetime and, even more pronouncedly, higher past year prevalence compared with high-income countries.

Interpretation: These findings show that intimate partner violence against women was already highly prevalent across the globe before the COVID-19 pandemic. Governments are not on track to meet the SDG targets on the elimination of violence against women and girls, despite robust evidence that intimate partner violence can be prevented. There is an urgent need to invest in effective multisectoral interventions, strengthen the public health response to intimate partner violence, and ensure it is addressed in post-COVID-19 reconstruction efforts."

Other Infectious Diseases and Public Health Threats

News in Brief

"Recall issued for thousands of Skippy Peanut Butter cases due to steel fragments" ([NPR](#)).

"WHO releases 10-year strategy for genomic surveillance of pathogens" ([WHO](#); see also: [report](#)).

Prevention

"Can we vaccinate against Epstein-Barr, the virus you didn't know you had?" ([Guardian](#))

"The quest to prevent MS — and understand other post-viral diseases: Some people develop multiple sclerosis after an infection. Could a vaccine prevent that — and what does it reveal about the long-term effects of viruses?" ([Nature](#))

Journal Articles

MMWR: [Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2022](#) (01 April 2022)

"What is already known about this topic? Vaccination with hepatitis B (HepB) vaccines shows well-established safety and efficacy. However, because of risk factor–based

approaches of previous vaccination recommendations, coverage among adults has been suboptimal.

What is added by this report? In addition to groups for whom HepB vaccination is already recommended, the Advisory Committee on Immunization Practices recommends that all adults aged 19–59 years should receive HepB vaccines.

What are the implications for public health practice? Universal adult HepB vaccination through age 59 years removes the need for risk factor screening and disclosure and could increase vaccination coverage and decrease hepatitis B cases."

MMWR: [Tuberculosis — United States, 2021](#) (25 March 2022)

"What is already known about this topic? The number of reported U.S. tuberculosis (TB) cases decreased sharply in 2020, possibly related to multiple factors associated with the COVID-19 pandemic.

What is added by this report? Reported TB incidence (cases per 100,000 persons) increased 9.4%, from 2.2 during 2020 to 2.4 during 2021 but was lower than incidence during 2019 (2.7). Increases occurred among both U.S.-born and non-U.S.-born persons.

What are the implications for public health practice? Factors contributing to changes in reported TB during 2020–2021 likely include an actual reduction in TB incidence as well as delayed or missed TB diagnoses. Timely evaluation and treatment of TB and latent tuberculosis infection remain critical to achieving U.S. TB elimination."

References

Journal Articles

Acad Pediatr: Risser L, Berger RP, Renov V, Aboiye F, Duplessis V, Henderson C, Randell KA, Miller E, Ragavan M. Supporting children experiencing family violence during the COVID-19 pandemic: IPV and CPS provider perspectives. Acad Pediatr. 2022 Mar 24:S1876-2859(22)00178-4. doi: 10.1016/j.acap.2022.03.011. Epub ahead of print. PMID: 35342034. Link: <https://www.sciencedirect.com/science/article/pii/S1876285922001784>

Behav Med: Zhou X, Nguyen-Feng VN, Wamser-Nanney R, Lotzin A. Racism, Posttraumatic Stress Symptoms, and Racial Disparity in the U.S. COVID-19 Syndemic. Behav Med. 2022 Mar 23:1-10. doi: 10.1080/08964289.2021.2006131. Epub ahead of print. PMID: 35318897. Link: <https://www.tandfonline.com/doi/abs/10.1080/08964289.2021.2006131>

BMC Infect Dis: Foster HME, Ho FK, Mair FS, Jani BD, Sattar N, Katikireddi SV, Pell JP, Niedzwiedz CL, Hastie CE, Anderson JJ, Nicholl BI, Gill JMR, Celis-Morales C, O'Donnell CA. The association between a lifestyle score, socioeconomic status, and COVID-19 outcomes within the UK Biobank cohort. BMC Infect Dis. 2022 Mar 30;22(1):273. doi: 10.1186/s12879-022-07132-9. PMID: 35351028. Link: <https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-022-07132-9>

BMJ: Fralick M, Colacci M, Munshi L, Venus K, Fidler L, Hussein H, Britto K, Fowler R, da Costa BR, Dhalla I, Dunbar-Yaffe R, Branfield Day L, MacMillan TE, Zipursky J, Carpenter T, Tang T, Cooke A, Hensel R, Bregger M, Gordon A, Worndl E, Go S, Mandelzweig K, Castellucci LA, Tamming D, Razak F, Verma AA; COVID Prone Study Investigators. Prone positioning of patients with moderate hypoxaemia due to covid-19: multicentre pragmatic randomised trial (COVID-PRONE). BMJ. 2022 Mar 23;376:e068585. doi: 10.1136/bmj-2021-068585. PMID: 35321918; PMCID: PMC8941343. Link: <https://www.bmj.com/content/376/bmj-2021-068585.short>

Cancer: Joung RH, Nelson H, Mullett TW, Kurtzman SH, Shafir S, Harris JB, Yao KA, Brajcich BC, Bilimoria KY, Cance WG. A national quality improvement study identifying and addressing cancer screening deficits due to the COVID-19 pandemic. Cancer. 2022 Mar 21. doi: 10.1002/cncr.34157. Epub ahead of print. PMID: 35307815. Link: <https://acsjournals.onlinelibrary.wiley.com/doi/10.1002/cncr.34157>

Clin Infect Dis: Ng OT, Koh V, Chiew CJ, Marimuthu K, Thevasagayam NM, Mak TM, Chua JK, Ong SSH, Lim YK, Ferdous Z, Bte Johari AK, Cui L, Lin RTP, Tan KB, Cook AR, Leo YS, Lee VJM. Impact of SARS-CoV-2 Vaccination and Paediatric Age on Delta Variant Household Transmission. Clin Infect Dis. 2022 Mar 22:ciac219. doi: 10.1093/cid/ciac219. Epub ahead of print. PMID: 35323887. Link: <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciac219/6551710>

Clin Infect Dis: Sivapalasingam S, Lederer DJ, Bhore R, Hajizadeh N, Criner G, Hosain R, Mahmood A, Giannelou A, Somersan-Karakaya S, O'Brien MP, Boyapati A, Parrino J, Musser BJ, Labriola-Tompkins E, Ramesh D, Purcell LA, Gulabani D, Kampman W, Waldron A, Gong MN, Saggari S, Sperber SJ, Menon V, Stein DK, Sobieszczyk ME, Park W, Aberg JA, Brown SM, Kosmicki JA, Horowitz JE, Ferreira MA, Baras A, Kowal B, DiCioccio AT, Akinlade B, Nivens MC, Braunstein N, Herman GA, Yancopoulos GD, Weinreich DM; Sarilumab-COVID-19 Study Team. Efficacy and Safety of Sarilumab in Hospitalized Patients With COVID-19: A Randomized Clinical Trial. Clin Infect Dis. 2022 Feb 26:ciac153. doi: 10.1093/cid/ciac153. Epub ahead of print. PMID: 35219277; PMCID: PMC8903479. Link: <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciac153/6537638>

Clin Infect Dis: Tande AJ, Swift MD, Challener DW, Berbari EF, Tommaso CP, Christopherson DR, Binnicker MJ, Breeher LE. Utility of Follow-up COVID-19 Antigen Tests After Acute SARS-CoV-2 Infection Among Healthcare Personnel. Clin Infect Dis. 2022 Mar 30:ciac235. doi:

10.1093/cid/ciac235. Epub ahead of print. PMID: 35352091. Link:

<https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciac235/6555774>

Clin Microbiol Infect: Peghin M, De Martino M, Palese A, Gerussi V, Bontempo G, Graziano E, Visintini E, Elia D, Dellai F, Marrella F, Fabris M, Curcio F, Sartor A, Isola M, Tascini C. Post-COVID-19 syndrome and humoral response association after one year in vaccinated and unvaccinated patients. Clin Microbiol Infect. 2022 Mar 23:S1198-743X(22)00155-0. doi: 10.1016/j.cmi.2022.03.016. Epub ahead of print. PMID: 35339673; PMCID: PMC8940723. Link: [https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X\(22\)00155-0/fulltext](https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(22)00155-0/fulltext)

CMAJ: Parmar A, Eskander A, Sander B, Naimark D, Irish JC, Chan KKW. Impact of cancer surgery slowdowns on patient survival during the COVID-19 pandemic: a microsimulation modelling study. CMAJ. 2022 Mar 21;194(11):E408-E414. doi: 10.1503/cmaj.202380. PMID: 35314440. Link: <https://www.cmaj.ca/content/194/11/E408>

Diabetes Care: Wander PL, Lowy E, Beste LA, Tulloch-Palomino L, Korpak A, Peterson AC, Kahn SE, Boyko EJ. The Incidence of Diabetes Among 2,777,768 Veterans With and Without Recent SARS-CoV-2 Infection. Diabetes Care. 2022 Apr 1;45(4):782-788. doi: 10.2337/dc21-1686. PMID: 35085391. Link: <https://diabetesjournals.org/care/article/45/4/782/141025/The-Incidence-of-Diabetes-Among-2-777-768-Veterans>

Disaster Med Public Health Prep: Ecker A, Berenson AB, Gonzalez SJ, Zoorob R, Hirth JM. Depression among medical students in the United States during the COVID-19 pandemic: The role of communication between universities and their students. Disaster Med Public Health Prep. 2022 Mar 4:1-21. doi: 10.1017/dmp.2022.56. Epub ahead of print. PMID: 35241197. Link: <https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/article/depression-among-medical-students-in-the-united-states-during-the-covid19-pandemic-the-role-of-communication-between-universities-and-their-students/0BE87AE8FB2C5FD712FA5F2E4F1B6F1B>

Disaster Med Public Health Prep: Mullinax R, Krug A, Harvey K, Wilde C, Nzegwu U, Wilcox C, Rice M, Lipsitz R. Effectiveness of a COVID-19 Preventive Sequestration Strategy: Deployment of the Aircraft Carrier USS Ronald Reagan (CVN-76). Disaster Med Public Health Prep. 2022 Mar 23:1-10. doi: 10.1017/dmp.2022.66. Epub ahead of print. PMID: 35317873. Link: <https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/article/effectiveness-of-a-covid19-preventive-sequestration-strategy-deployment-of-the-aircraft-carrier-uss-ronald-reagan-cvn76/9EFBA6363CFE749C0B7236E603C300A1>

Influenza Other Respir Viruses: Han JH, Womack KN, Tenforde MW, Files DC, Gibbs KW, Shapiro NI, Prekker ME, Erickson HL, Steingrub JS, Qadir N, Khan A, Hough CL, Johnson NJ, Ely EW, Rice TW, Casey JD, Lindsell CJ, Gong MN, Srinivasan V, Lewis NM, Patel MM, Self WH; Influenza and Other Viruses in the Acutely Ill (IVY) Network. Associations between persistent symptoms after

mild COVID-19 and long-term health status, quality of life, and psychological distress. *Influenza Other Respir Viruses*. 2022 Mar 28. doi: 10.1111/irv.12980. Epub ahead of print. PMID: 35347854. Link: <https://onlinelibrary.wiley.com/doi/10.1111/irv.12980>

Int J Environ Res Public Health: Langhinrichsen-Rohling J, Schroeder GE, Langhinrichsen-Rohling RA, Mennicke A, Harris YJ, Sullivan S, Gray G, Cramer RJ. Couple Conflict and Intimate Partner Violence during the Early Lockdown of the Pandemic: The Good, the Bad, or Is It Just the Same in a North Carolina, Low-Resource Population? *Int J Environ Res Public Health*. 2022 Feb 24;19(5):2608. doi: 10.3390/ijerph19052608. PMID: 35270300; PMCID: PMC8910169. Link: <https://www.mdpi.com/1660-4601/19/5/2608>

J Infect Dis: Morens DM, Folkers GK, Fauci AS. The Concept of Classical Herd Immunity May Not Apply to COVID-19. *J Infect Dis*. 2022 Mar 31;jiac109. doi: 10.1093/infdis/jiac109. Epub ahead of print. PMID: 35356987. Link: <https://academic.oup.com/jid/advance-article/doi/10.1093/infdis/jiac109/6561438>

JAMA: Adhikari EH, MacDonald L, SoRelle JA, Morse J, Pruszynski J, Spong CY. COVID-19 Cases and Disease Severity in Pregnancy and Neonatal Positivity Associated With Delta (B.1.617.2) and Omicron (B.1.1.529) Variant Predominance. *JAMA*. 2022 Mar 24. doi: 10.1001/jama.2022.4356. Epub ahead of print. PMID: 35325015. Link: <https://jamanetwork.com/journals/jama/fullarticle/2790609>

JAMA: Fell DB, Dhinsa T, Alton GD, Török E, Dimanlig-Cruz S, Regan AK, Sprague AE, Buchan SA, Kwong JC, Wilson SE, Håberg SE, Gravel CA, Wilson K, El-Chaâr D, Walker MC, Barrett J, MacDonald SE, Okun N, Shah PS, Dougan SD, Dunn S, Bisnaire L. Association of COVID-19 Vaccination in Pregnancy With Adverse Peripartum Outcomes. *JAMA*. 2022 Mar 24. doi: 10.1001/jama.2022.4255. Epub ahead of print. PMID: 35323842. Link: <https://jamanetwork.com/journals/jama/fullarticle/2790607>

JAMA: Magnus MC, Örtqvist AK, Dahlqvist E, Ljung R, Skår F, Oakley L, Macsali F, Pasternak B, Gjessing HK, Håberg SE, Stephansson O. Association of SARS-CoV-2 Vaccination During Pregnancy With Pregnancy Outcomes. *JAMA*. 2022 Mar 24. doi: 10.1001/jama.2022.3271. Epub ahead of print. PMID: 35323851. Link: <https://jamanetwork.com/journals/jama/fullarticle/2790608>

JAMA: REMAP-CAP Writing Committee for the REMAP-CAP Investigators, Bradbury CA, Lawler PR, Stanworth SJ, McVerry BJ, McQuilten Z, Higgins AM, Mouncey PR, Al-Beidh F, Rowan KM, Berry LR, Lorenzi E, Zarychanski R, Arabi YM, Annane D, Beane A, van Bentum-Puijk W, Bhimani Z, Bihari S, Bonten MJM, Brunkhorst FM, Buzgau A, Buxton M, Carrier M, Cheng AC, Cove M, Detry MA, Estcourt LJ, Fitzgerald M, Girard TD, Goligher EC, Goossens H, Haniffa R, Hills T, Huang DT, Horvat CM, Hunt BJ, Ichihara N, Lamontagne F, Leavis HL, Linstrum KM, Litton E, Marshall JC, McAuley DF, McGlothlin A, McGuinness SP, Middeldorp S, Montgomery SK, Morpeth SC, Murthy S, Neal MD, Nichol AD, Parke RL, Parker JC, Reyes L, Saito H, Santos MS,

Saunders CT, Serpa-Neto A, Seymour CW, Shankar-Hari M, Singh V, Tolppa T, Turgeon AF, Turner AM, van de Veerdonk FL, Green C, Lewis RJ, Angus DC, McArthur CJ, Berry S, Derde LPG, Webb SA, Gordon AC. Effect of Antiplatelet Therapy on Survival and Organ Support-Free Days in Critically Ill Patients With COVID-19: A Randomized Clinical Trial. JAMA. 2022 Mar 22. doi: 10.1001/jama.2022.2910. Epub ahead of print. PMID: 35315874. Link: <https://jamanetwork.com/journals/jama/fullarticle/2790488>

JAMA Intern Med: Ferrara A, Hedderson MM, Zhu Y, Avalos LA, Kuzniewicz MW, Myers LC, Ngo AL, Gunderson EP, Ritchie JL, Quesenberry CP, Greenberg M. Perinatal Complications in Individuals in California With or Without SARS-CoV-2 Infection During Pregnancy. JAMA Intern Med. 2022 Mar 21. doi: 10.1001/jamainternmed.2022.0330. Epub ahead of print. PMID: 35311909. Link: <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2790318>

JAMA Netw Open: Chow JH, Rahnavard A, Gomberg-Maitland M, Chatterjee R, Patodi P, Yamane DP, Levine AR, Davison D, Hawkins K, Jackson AM, Quintana MT, Lankford AS, Keneally RJ, Al-Mashat M, Fisher D, Williams J, Berger JS, Mazzeffi MA, Crandall KA; N3C Consortium and ANCHOR Investigators. Association of Early Aspirin Use With In-Hospital Mortality in Patients With Moderate COVID-19. JAMA Netw Open. 2022 Mar 1;5(3):e223890. doi: 10.1001/jamanetworkopen.2022.3890. PMID: 35323950. Link: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2790439>

JAMA Netw Open: Fu J, Reid SA, French B, Hennessy C, Hwang C, Gatson NT, Duma N, Mishra S, Nguyen R, Hawley JE, Singh SRK, Chism DD, Venepalli NK, Warner JL, Choueiri TK, Schmidt AL, Fecher LA, Girard JE, Bilen MA, Ravindranathan D, Goyal S, Wise-Draper TM, Park C, Painter CA, McGlown SM, de Lima Lopes G Jr, Serrano OK, Shah DP; COVID-19 and Cancer Consortium (CCC19). Racial Disparities in COVID-19 Outcomes Among Black and White Patients With Cancer. JAMA Netw Open. 2022 Mar 1;5(3):e224304. doi: 10.1001/jamanetworkopen.2022.4304. PMID: 35344045. Link: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2790424>

JAMA Netw Open: Huynh A, Sehn JK, Goldfarb IT, Watkins J, Torous V, Heerema-McKenney A, Roberts DJ. SARS-CoV-2 Placentitis and Intraparenchymal Thrombohematomas Among COVID-19 Infections in Pregnancy. JAMA Netw Open. 2022 Mar 1;5(3):e225345. doi: 10.1001/jamanetworkopen.2022.5345. PMID: 35311965. Link: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2790175>

JAMA Netw Open: Musshafen LA, El-Sadek L, Lirette ST, Summers RL, Compretta C, Dobbs TE 3rd. In-Hospital Mortality Disparities Among American Indian and Alaska Native, Black, and White Patients With COVID-19. JAMA Netw Open. 2022 Mar 1;5(3):e224822. doi: 10.1001/jamanetworkopen.2022.4822. PMID: 35353166. Link: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2790506>

JAMA Netw Open: Wisniewski M, Chun A, Volpi S, Muscal E, Sexson Tejtzel SK, Munoz F, Vogel TP. Outcomes After SARS-CoV-2 Vaccination Among Children With a History of Multisystem Inflammatory Syndrome. JAMA Netw Open. 2022 Mar 1;5(3):e224750. doi:

10.1001/jamanetworkopen.2022.4750. PMID: 35344047. Link:

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2790426>

JAMA Pediatr: Villacis-Nunez DS, Jones K, Jabbar A, Fan L, Moore W, Peter AS, Henderson M, Xiang Y, Kelleman MS, Sherry W, Chandrakasan S, Oster ME, Jaggi P, Prahalad S. Short-term Outcomes of Corticosteroid Monotherapy in Multisystem Inflammatory Syndrome in Children. JAMA Pediatr. 2022 Mar 28. doi: 10.1001/jamapediatrics.2022.0292. Epub ahead of print.

PMID: 35344042. Link: <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2790362>

JCI Insight: Karron RA, Garcia Quesada M, Schappell EA, Schmidt SD, Deloria Knoll M, Hetrich MK, Veguilla V, Doria-Rose NA, Dawood FS. Binding and neutralizing antibody responses to SARS-CoV-2 in young children exceed those in adults. JCI Insight. 2022 Mar 22:e157963. doi: 10.1172/jci.insight.157963. Epub ahead of print. PMID: 35316213. Link:

<https://insight.jci.org/articles/view/157963>

Lancet: Sardinha L, Maheu-Giroux M, Stöckl H, Meyer SR, García-Moreno C. Global, regional, and national prevalence estimates of physical or sexual, or both, intimate partner violence against women in 2018. Lancet. 2022 Feb 26;399(10327):803-813. doi: 10.1016/S0140-6736(21)02664-7. Epub 2022 Feb 16. PMID: 35182472; PMCID: PMC8885817. Link:

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)02664-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02664-7/fulltext)

Lancet: Swets MC, Russell CD, Harrison EM, Docherty AB, Lone N, Girvan M, Hardwick HE; ISARIC4C Investigators, Visser LG, Openshaw PJM, Groeneveld GH, Semple MG, Baillie JK. SARS-CoV-2 co-infection with influenza viruses, respiratory syncytial virus, or adenoviruses. Lancet. 2022 Mar 25:S0140-6736(22)00383-X. doi: 10.1016/S0140-6736(22)00383-X. Epub ahead of print. PMID: 35344735; PMCID: PMC8956294. Link:

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(22\)00383-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)00383-X/fulltext)

Lancet Diabetes Endocrinol: Xie Y, Al-Aly Z. Risks and burdens of incident diabetes in long COVID: a cohort study. Lancet Diabetes Endocrinol. 2022 Mar 21:S2213-8587(22)00044-4. doi: 10.1016/S2213-8587(22)00044-4. Epub ahead of print. PMID: 35325624; PMCID: PMC8937253. Link: [https://www.thelancet.com/journals/landia/article/PIIS2213-8587\(22\)00044-4/fulltext](https://www.thelancet.com/journals/landia/article/PIIS2213-8587(22)00044-4/fulltext)

Lancet Glob Health: Roozen GVT, Roukens AHE, Roestenberg M. COVID-19 vaccine dose sparing: strategies to improve vaccine equity and pandemic preparedness. Lancet Glob Health. 2022 Apr;10(4):e570-e573. doi: 10.1016/S2214-109X(22)00075-4. PMID: 35303466; PMCID: PMC8923677. Link: [https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(22\)00075-4/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(22)00075-4/fulltext)

MMWR: Filardo TD, Feng P, Pratt RH, Price SF, Self JL. Tuberculosis — United States, 2021.

MMWR Morb Mortal Wkly Rep 2022;71:441–446. DOI:

<http://dx.doi.org/10.15585/mmwr.mm7112a1> Link:

<https://www.cdc.gov/mmwr/volumes/71/wr/mm7112a1.htm>

MMWR: Taylor CA, Whitaker M, Anglin O, et al. COVID-19–Associated Hospitalizations Among Adults During SARS-CoV-2 Delta and Omicron Variant Predominance, by Race/Ethnicity and Vaccination Status — COVID-NET, 14 States, July 2021–January 2022. MMWR Morb Mortal Wkly Rep 2022;71:466–473. DOI: <http://dx.doi.org/10.15585/mmwr.mm7112e2> Link:

<https://www.cdc.gov/mmwr/volumes/71/wr/mm7112e2.htm>

MMWR: Tenforde MW, Self WH, Gaglani M, et al. Effectiveness of mRNA Vaccination in Preventing COVID-19–Associated Invasive Mechanical Ventilation and Death — United States, March 2021–January 2022. MMWR Morb Mortal Wkly Rep 2022;71:459–465. DOI:

<http://dx.doi.org/10.15585/mmwr.mm7112e1> Link:

<https://www.cdc.gov/mmwr/volumes/71/wr/mm7112e1.htm>

MMWR: Weng MK, Doshani M, Khan MA, et al. Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2022. MMWR Morb Mortal Wkly Rep 2022;71:477–483. DOI:

<http://dx.doi.org/10.15585/mmwr.mm7113a1> Link:

<https://www.cdc.gov/mmwr/volumes/71/wr/mm7113a1.htm>

NEJM: Moreira ED Jr, Kitchin N, Xu X, Dychter SS, Lockhart S, Gurtman A, Perez JL, Zerbini C, Dever ME, Jennings TW, Brandon DM, Cannon KD, Koren MJ, Denham DS, Berhe M, Fitz-Patrick D, Hammitt LL, Klein NP, Nell H, Keep G, Wang X, Koury K, Swanson KA, Cooper D, Lu C, Türeci Ö, Lagkadinou E, Tresnan DB, Dormitzer PR, Şahin U, Gruber WC, Jansen KU; C4591031 Clinical Trial Group. Safety and Efficacy of a Third Dose of BNT162b2 Covid-19 Vaccine. N Engl J Med. 2022 Mar 23. doi: 10.1056/NEJMoa2200674. Epub ahead of print. PMID: 35320659. Link:

<https://www.nejm.org/doi/full/10.1056/NEJMoa2200674>

NEJM: Price AM, Olson SM, Newhams MM, Halasa NB, Boom JA, Sahni LC, Pannaraj PS, Irby K, Bline KE, Maddux AB, Nofziger RA, Cameron MA, Walker TC, Schwartz SP, Mack EH, Smallcomb L, Schuster JE, Hobbs CV, Kamidani S, Tarquinio KM, Bradford TT, Levy ER, Chiotos K, Bhumbra SS, Cvijanovich NZ, Heidemann SM, Cullimore ML, Gertz SJ, Coates BM, Staat MA, Zinter MS, Kong M, Chatani BM, Hume JR, Typpo KV, Maamari M, Flori HR, Tenforde MW, Zambrano LD, Campbell AP, Patel MM, Randolph AG; Overcoming Covid-19 Investigators. BNT162b2 Protection against the Omicron Variant in Children and Adolescents. N Engl J Med. 2022 Mar 30. doi: 10.1056/NEJMoa2202826. Epub ahead of print. PMID: 35353976. Link:

<https://www.nejm.org/doi/full/10.1056/NEJMoa2202826>

NEJM: Reis G, Silva EASM, Silva DCM, Thabane L, Milagres AC, Ferreira TS, Dos Santos CVQ, Campos VHS, Nogueira AMR, de Almeida APFG, Callegari ED, Neto ADF, Savassi LCM, Simplicio

MIC, Ribeiro LB, Oliveira R, Harari O, Forrest JI, Ruton H, Sprague S, McKay P, Guo CM, Rowland-Yeo K, Guyatt GH, Boulware DR, Rayner CR, Mills EJ; TOGETHER Investigators. Effect of Early Treatment with Ivermectin among Patients with Covid-19. *N Engl J Med*. 2022 Mar 30. doi: 10.1056/NEJMoa2115869. Epub ahead of print. PMID: 35353979. Link:

<https://www.nejm.org/doi/full/10.1056/NEJMoa2115869>

NEJM: Sullivan DJ, Gebo KA, Shoham S, Bloch EM, Lau B, Shenoy AG, Mosnaim GS, Gniadek TJ, Fukuta Y, Patel B, Heath SL, Levine AC, Meisenberg BR, Spivak ES, Anjan S, Huaman MA, Blair JE, Currier JS, Paxton JH, Gerber JM, Petrini JR, Broderick PB, Rausch W, Cordisco ME, Hammel J, Greenblatt B, Cluzet VC, Cruser D, Oei K, Abinante M, Hammitt LL, Sutcliffe CG, Forthal DN, Zand MS, Cachay ER, Raval JS, Kassaye SG, Foster EC, Roth M, Marshall CE, Yarava A, Lane K, McBee NA, Gawad AL, Karlen N, Singh A, Ford DE, Jabs DA, Appel LJ, Shade DM, Ehrhardt S, Baksh SN, Laeyendecker O, Pekosz A, Klein SL, Casadevall A, Tobian AAR, Hanley DF. Early Outpatient Treatment for Covid-19 with Convalescent Plasma. *N Engl J Med*. 2022 Mar 30. doi: 10.1056/NEJMoa2119657. Epub ahead of print. PMID: 35353960. Link:

<https://www.nejm.org/doi/full/10.1056/NEJMoa2119657>

Pediatrics: Rahman R, Huysman C, Ross AM, Boskey ER. Intimate Partner Violence and the COVID-19 Pandemic. *Pediatrics*. 2022 Mar 22. doi: 10.1542/peds.2021-055792. Epub ahead of print. PMID: 35314862. Link:

<https://publications.aap.org/pediatrics/article/doi/10.1542/peds.2021-055792/185448/Intimate-Partner-Violence-and-the-COVID-19>

Psychol Violence: Parrott DJ, Halmos MB, Stappenbeck CA, Moino K. Intimate Partner Aggression During the COVID-19 Pandemic: Associations With Stress and Heavy Drinking. *Psychol Violence*. 2022 Mar;12(2):95-103. doi: 10.1037/vio0000395. Epub 2021 Aug 2. PMID: 35310779; PMCID: PMC8932678. Link: <https://doi.apa.org/fulltext/2021-70494-001.html>

QJM: Zhan K, Zhang X, Wang B, Jiang Z, Fang X, Yang S, Jia H, Li L, Cao G, Zhang K, Ma X. Short- and long-term prognosis of glycemic control in COVID-19 patients with type 2 diabetes. *QJM*. 2022 Mar 22;115(3):131-139. doi: 10.1093/qjmed/hcac020. PMID: 35094081; PMCID: PMC8807330. Link: <https://academic.oup.com/qjmed/article-abstract/115/3/131/6517510>

Rev Med Virol: Walsh KA, Broderick N, Ahern S, Fawsitt CG, O'Brien KM, Carrigan M, Harrington P, O'Neill M, Smith SM, Spillane S, Teljeur C, Ryan M. Effectiveness of rapid antigen testing for screening of asymptomatic individuals to limit the transmission of SARS-CoV-2: A rapid review. *Rev Med Virol*. 2022 Mar 29:e2350. doi: 10.1002/rmv.2350. Epub ahead of print. PMID: 35348276. Link: <https://onlinelibrary.wiley.com/doi/10.1002/rmv.2350>

Soc Sci Med: Skinner-Dorkenoo AL, Sarmal A, Rogbeer K, et al. Highlighting COVID-19 racial disparities can reduce support for safety precautions among White U.S. residents. *Soc Sci Med*. Available online 29 March 2022, 114951 Link:

<https://www.sciencedirect.com/science/article/pii/S027795362200257X>

Trauma Surg Acute Care Open: Choi JK, Prabhakaran K, Latifi R, Smiley A, Klein J, Lombardo G, Rhee P. Serial rotational thromboelastography (ROTEM) in mechanically ventilated patients with COVID-19 demonstrates hypercoagulopathy despite therapeutic heparinization. Trauma Surg Acute Care Open. 2022 Mar 10;7(1):e000603. doi: 10.1136/tsaco-2020-000603. PMID: 35291340; PMCID: PMC8914399. Link: <https://tsaco.bmj.com/content/7/1/e000603>

Special Reports and Other Resources

BCAC: Black Coalition Against COVID-19. The State Of Black America And Covid-19: A Two-Year Assessment (29 March 2022). Link: <https://blackcoalitionagainstcovid.org/the-state-of-black-america-and-covid-19/>

News in Brief

AP: Associated Press. Tom Murphy. Doctors finding hurdles to using pills to treat COVID-19 (21 March 2022). Link: <https://apnews.com/article/biden-covid-science-business-health-eebb8cbe3b0e7ae16eafefb5abc85d2d>

AP: Associated Press. Mike Stobbe. Experts worry about how US will see next COVID surge coming (25 March 2022). Link: <https://apnews.com/article/covid-science-health-pandemics-wastewater-9b6589e908c8532db0922cc4ed3f3910>

AP: Associated Press. Laura Ungar. Into the wild: animals the latest frontier in the COVID fight (30 March 2022). Link: <https://apnews.com/article/into-wild-animals-latest-frontier-covid-03ffc4fd156de891652e902ca884234f>

Atlantic: The Atlantic. Benjamin Mazer. Get Ready for a Wave of Missed Infections (23 March 2022). Link: <https://www.theatlantic.com/health/archive/2022/03/ba2-variant-rapid-testing/627591/>

Atlantic: The Atlantic. Katherine J. Wu. America Is About to Test How Long 'Normal' Can Hold (23 March 2022). Link: <https://www.theatlantic.com/health/archive/2022/03/next-covid-variant-surge-strategy/627597/>

Atlantic: The Atlantic. Katherine J. Wu. Why kids' COVID-Vaccine Results Don't Look Like Adults' (29 March 2022). Link: <https://www.theatlantic.com/health/archive/2022/03/how-effective-are-kids-covid-vaccines/629419/>

CIDRAP: Center for Infectious Disease Research and Policy. Stephanie Soucheray. White House diverges from CDC, focuses on aerosol COVID spread (24 March 2022). Link: <https://www.cidrap.umn.edu/news-perspective/2022/03/white-house-diverges-cdc-focuses-aerosol-covid-spread>

CIDRAP: Center for Infectious Disease Research and Policy. Mary Van Beusekom. Supply map created to predict drug shortages, find solutions (31 March 2022). Link:

<https://www.cidrap.umn.edu/news-perspective/2022/03/supply-map-created-predict-drug-shortages-find-solutions>

FAIR: FAIR Health. Press Release: Fifth Annual FAIR Health Report Captures Impact of COVID-19 Pandemic on Healthcare System (31 March 2022). Link: <https://www.fairhealth.org/press-release/fifth-annual-fair-health-report-captures-impact-of-covid-19-pandemic-on-healthcare-system>

FDA: US Food & Drug Administration. FDA to Hold Advisory Committee Meeting on COVID-19 Vaccines to Discuss Future Boosters (21 March 2022). Link: <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-hold-advisory-committee-meeting-covid-19-vaccines-discuss-future>

FDA: US Food & Drug Administration. FDA updates Sotrovimab emergency use authorization (30 March 2022). Link: <https://www.fda.gov/drugs/drug-safety-and-availability/fda-updates-sotrovimab-emergency-use-authorization>

Guardian: The Guardian. David Cox. Can we vaccinate against Epstein-Barr, the virus you didn't know you had? (20 March 2022). Link:

<https://www.theguardian.com/science/2022/mar/20/can-we-vaccinate-against-epstein-barr-virus-multiple-sclerosis-cancer>

JAMA: JAMA. Abbasi J. Pushed to Their Limits, 1 in 5 Physicians Intends to Leave Practice. JAMA. 2022 Mar 30. doi: 10.1001/jama.2022.5074. Epub ahead of print. PMID: 35353134. Link: <https://jamanetwork.com/journals/jama/fullarticle/2790791>

KHN: Kaiser Health News. Rachana Bradhan. 'The Danger Is Still There' — As Omicron Lurks, Native Americans Are Wary of Boosters (31 March 2022). Link: <https://khn.org/news/article/native-americans-covid-vaccine-boosters-lag/>

Medpage: Medpage Today. Judy George. What Drives Post-COVID Cognitive Changes? (01 April 2022). Link: <https://www.medpagetoday.com/neurology/generalneurology/97981>

Nature: Nature. Heidi Ledford. Can drugs reduce the risk of long COVID? What scientists know so far (25 March 2022). Link: <https://www.nature.com/articles/d41586-022-00823-y>

Nature: Nature. Amy Maxmen. Scientists struggle to probe COVID's origins amid sparse data from China (17 March 2022). Link: <https://www.nature.com/articles/d41586-022-00732-0>

Nature: Nature. Smriti Mallapaty. Genome data gaps could stymie search for next COVID variant (29 March 2022). Link: <https://www.nature.com/articles/d41586-022-00894-x>

Nature: Nature. Asher Mullard. The quest to prevent MS — and understand other post-viral diseases (30 March 2022). Link: <https://www.nature.com/articles/d41586-022-00808-x>

Nature: Nature. Lynne Peeples. Lessons from the COVID data wizards (23 March 2022; corrected 28 March 2022). Link: <https://www.nature.com/articles/d41586-022-00792-2>

Nature: Nature. Saima May Sidik. Vaccines protect against infection from Omicron subvariant — but not for long (18 March 2022). Link: <https://www.nature.com/articles/d41586-022-00775-3>

Nature: Nature. Emily Waltz. COVID vaccines: head-to-head comparison reveals how they stack up (29 March 2022). Link: <https://www.nature.com/articles/d41586-022-00885-y>

NBC: NBC News. Erika Edwards. WHO examining potential hearing problems linked to Covid vaccines (28 March 2022). Link: <https://www.nbcnews.com/health/health-news/examining-potential-hearing-problems-linked-covid-vaccines-rcna21911>

New Yorker: The New Yorker. Dhruv Khullar. How COVID Exploded in Hong Kong (25 March 2022). Link: <https://www.newyorker.com/news/as-told-to/how-covid-exploded-in-hong-kong>

NIH: National Institutes of Health. What's New in the Guidelines (updated 24 March 2022). Link: <https://www.covid19treatmentguidelines.nih.gov/about-the-guidelines/whats-new/>

NPR: National Public Radio. Jaclyn Diaz: Recall issued for thousands of Skippy Peanut Butter cases due to steel fragments (31 March 2022). Link: <https://www.npr.org/2022/03/31/1090142104/skippy-peanut-butter-recall-steel-fragments>

NPR: National Public Radio. Tamara Keith. A new federal website aims to solve a key COVID problem: where to get antiviral pills (30 March 2022). Link: <https://www.npr.org/2022/03/30/1089608854/covid-gov-new-website-offers-a-single-stop-for-covid-info-tests-and-treatment>

NPR: National Public Radio. Will Stone. Evidence grows that vaccines lower the risk of getting long COVID (24 March 2022). Link: <https://www.npr.org/sections/health-shots/2022/03/24/1088270403/long-covid-vaccines>

Reuters: Reuters. Italian study shows ventilation can cut school COVID cases by 82% (22 March 2022). Link: <https://www.reuters.com/world/europe/italian-study-shows-ventilation-can-cut-school-covid-cases-by-82-2022-03-22/>

Reuters: Reuters. Jennifer Rigby and Julie Steenhuisen. Omicron 'stealth' COVID variant BA.2 now dominant globally (29 March 2022). Link: <https://www.reuters.com/business/healthcare-pharmaceuticals/omicron-stealth-covid-variant-ba2-now-dominant-globally-2022-03-29/>

Reuters: Reuters. David Stanway. Why are Shanghai's COVID infections nearly all asymptomatic? (29 March 2022). Link: <https://www.reuters.com/world/china/why-are-shanghais-covid-infections-nearly-all-asymptomatic-2022-03-29/>

STAT: STATnews. Helen Branswell. The Covid-19 vaccine market is getting crowded — as demand begins to wane (21 March 2022). Link: <https://www.statnews.com/2022/03/21/the-covid-19-vaccine-market-is-getting-crowded-as-demand-begins-to-wane/>

STAT: STATnews. Helen Branswell and Matthew Herper. Moderna to ask FDA to authorize Covid-19 vaccine in children 6 months to 6 years (23 March 2022). Link: <https://www.statnews.com/2022/03/23/moderna-to-ask-fda-to-authorize-covid-19-vaccine-in-children-6-months-to-6-years/>

STAT: STATnews. Rachel Cohrs. 'A slow-moving glacier': NIH's sluggish and often opaque efforts to study long Covid draw patient, expert ire (29 March 2022). Link: <https://www.statnews.com/2022/03/29/nih-long-covid-sluggish-study/>

STAT: STATnews. Damian Garde. The internet's funniest doctor is in on the joke (25 March 2022). Link: <https://www.statnews.com/2022/03/25/dr-glaucomflecken-will-flanary-profile/>

STAT: STATnews. Andrew Joseph. 'I fear the long-term effects': Before his death, a nurse warned of the pandemic's toll on health care workers (23 March 2022). Link: <https://www.statnews.com/2022/03/23/nurse-warned-of-pandemic-mental-toll-health-workers/>

STAT: STATnews. Usha Lee McFarling. Covid-19 pandemic isn't over for Black Americans, report warns (29 March 2022). Link: <https://www.statnews.com/2022/03/29/covid-19-pandemic-isnt-over-for-black-americans-report-warns/>

Vox: Vox. Katherine Harmon Courage. It's not too late for new Covid-19 drugs to change the pandemic (28 March 2022). Link: <https://www.vox.com/the-highlight/22968986/covid-drugs-paxlovid-molnupiravir-health>

Vox: Vox. Rachel Wilkerson Miller. Covid-19 safety doesn't have to be all or nothing. Here's how to think about it going forward (30 March 2022). Link: <https://www.vox.com/23000377/how-to-use-covid-data-numbers-protect-yourself-high-risk>

WHO: World Health Organization. WHO releases 10-year strategy for genomic surveillance of pathogens (30 March 2022). Link: <https://www.who.int/news/item/30-03-2022-who-releases-10-year-strategy-for-genomic-surveillance-of-pathogens>

WP: Washington Post. Ariana Eunjung Cha. How covid brain fog may overlap with 'chemo brain' and Alzheimer's (27 March 2022). Link: <https://www.washingtonpost.com/health/2022/03/27/covid-brain-fog-chemo-brain-alzheimers-disease/>

WP: Washington Post. Dan Diamond, Rachel Rouben, and Yasmeen Abutaleb. White House officials say U.S. has exhausted funds to buy potential fourth vaccine dose for all Americans (22 March 2022). Link: <https://www.washingtonpost.com/health/2022/03/22/funding-fourth-vaccine-doses/>

WP: Washington Post. Amy Goldstein and Dan Keating. Pregnant people at much higher risk of breakthrough covid, study shows (31 March 2022). Link: <https://www.washingtonpost.com/health/2022/03/31/pregnancy-covid-risk/>

WP: Washington Post. Carolyn Y. Johnson. FDA authorizes second coronavirus booster shot for people 50 and older (29 March 2022). Link: <https://www.washingtonpost.com/health/2022/03/29/fda-authorizes-second-booster-shot/>

WP: Washington Post. Katie Shepherd. The pandemic threatens their lives, even though they don't have covid (29 March 2022). Link: <https://www.washingtonpost.com/health/2022/03/29/pandemic-chronically-ill-disabled-supply-shortage/>

WP: Washington Post. Adam Taylor. Why Covax, the best hope for vaccinating the world, was doomed to fall short (22 March 2022). Link: <https://www.washingtonpost.com/world/2022/03/22/covax-problems-coronavirus-vaccines-next-pandemic/>